

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 15, 2004, 17:01:09 ; Search time 106.053 Seconds
(without alignments)
361.932 Million cell updates/sec

Title: US-09-897-724-3
Perfect score: 557
Sequence: 1 DILLTQSPALISVPCERVS.....CQSHSWPTFGSGTNLEVK 107

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: Geneseq1980s:*

2: Geneseq1990s:*

3: Geneseq2000s:*

4: Geneseq2001s:*

5: Geneseq2002s:*

6: Geneseq2003as:*

7: Geneseq2003bs:*

8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|--------------------|
| 1 | 557 | 100.0 | 107 | 2 | AAW28531 Humanised |
| 2 | 557 | 100.0 | 107 | 2 | AAW40820 Light cha |
| 3 | 557 | 100.0 | 107 | 2 | AAW23243 Light cha |
| 4 | 557 | 100.0 | 107 | 4 | AAG79125 Amino aci |
| 5 | 557 | 100.0 | 107 | 4 | AAE10849 Mouse lig |
| 6 | 557 | 100.0 | 107 | 4 | AAG67762 Anti-TNF |
| 7 | 557 | 100.0 | 107 | 5 | ABG70572 Human-mur |
| 8 | 557 | 100.0 | 107 | 5 | ABP54870 Murine an |
| 9 | 557 | 100.0 | 107 | 5 | AAW47941 Chimeric |
| 10 | 557 | 100.0 | 107 | 6 | ABU09889 Mouse TNF |
| 11 | 557 | 100.0 | 107 | 6 | ABG72948 Chimeric |
| 12 | 557 | 100.0 | 107 | 6 | ABG75766 CA2 varia |
| 13 | 557 | 100.0 | 107 | 6 | ABG75773 CA2 varia |
| 14 | 557 | 100.0 | 107 | 6 | ABU63587 Mouse ca2 |
| 15 | 557 | 100.0 | 107 | 7 | ADU46570 Mouse ca2 |
| 16 | 557 | 100.0 | 107 | 7 | ADC61356 Cloned mu |
| 17 | 557 | 100.0 | 107 | 7 | ADD44656 Human ca2 |
| 18 | 557 | 100.0 | 107 | 7 | ABW02401 Murine an |
| 19 | 557 | 100.0 | 107 | 7 | ADE96350 Chimeric |
| 20 | 557 | 100.0 | 107 | 7 | ABW02036 Murine an |
| 21 | 557 | 100.0 | 107 | 7 | ADF91148 CA2 light |
| 22 | 557 | 100.0 | 107 | 7 | ADG27430 Mouse mon |
| 23 | 557 | 100.0 | 107 | 7 | ADJ63987 Murine V |
| 24 | 557 | 100.0 | 107 | 7 | ADM15644 Murine li |
| 25 | 557 | 100.0 | 107 | 7 | ADME3149 Murine va |

| | | | | | |
|----|-----|-------|-----|---|---------------------|
| 26 | 557 | 100.0 | 107 | 8 | ADF89616 Mouse ant |
| 27 | 557 | 100.0 | 107 | 8 | ADH89387 Human tra |
| 28 | 557 | 100.0 | 107 | 8 | ADI29705 Anti-TNFA |
| 29 | 557 | 100.0 | 107 | 8 | ADL70798 Anti-TNFA |
| 30 | 557 | 100.0 | 226 | 6 | ABR55861 Remicade |
| 31 | 557 | 100.0 | 226 | 8 | ADN49714 Human ant |
| 32 | 557 | 100.0 | 240 | 8 | ADH89383 Human tra |
| 33 | 515 | 92.5 | 126 | 1 | AAW4176 Chimeric |
| 34 | 514 | 92.3 | 127 | 2 | AAW4176 Monoclonal |
| 35 | 506 | 90.8 | 107 | 2 | AAW4176 Monoclonal |
| 36 | 502 | 90.1 | 107 | 5 | AAU72842 Anti-NGK2 |
| 37 | 502 | 90.1 | 107 | 5 | AAU72850 Anti-NGK2 |
| 38 | 502 | 90.1 | 108 | 7 | ADG75665 Humanised |
| 39 | 502 | 90.1 | 219 | 7 | ADC79230 OC125-3.1 |
| 40 | 502 | 90.1 | 242 | 4 | AB31426 Protein u |
| 41 | 502 | 90.1 | 244 | 2 | AAW4176 Mucin Tn |
| 42 | 502 | 90.1 | 244 | 4 | AB31425 Protein u |
| 43 | 502 | 90.1 | 510 | 5 | AAU72859 6E5A7x4-7 |
| 44 | 502 | 90.1 | 510 | 5 | AAU72860 Human p53 |
| 45 | 501 | 89.9 | 108 | 7 | ADI57805 Monoclonal |

ALIGNMENTS

RESULT 1
AAW28531
ID AAW28531 standard; protein; 107 AA.
XX AC AAW28531;
XX XX
DT 25-MAR-2003 (revised)
DT 12-JAN-1998 (first entry)
XX XX
DE Humanised CA2 light chain variable region.
XX XX
KW TNF; tumour necrosis factor; Crohn's disease; CA2 antibody.
XX XX
OS Synthetic.
PN US5656272-A.
XX XX
PD 12-AUG-1997.
XX XX
PF 04-FEB-1994; 94US-00192102.
XX XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 26-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
XX XX
PA (CENZ) CENTOCOR INC.
XX XX
PI (UUNY-) UNIV NEW YORK MEDICAL CENT.
XX XX
PI Dadonna P, Le J, Ghayeb J, Knight D, Siegel SA, Vilcek J;
XX XX
DR WPI; 1997-414547/38.
XX XX
DR N-PSDB; AAT87441.
XX XX
PT Treatment of Crohn's disease - by administering humanised CA2 antibody specific for tumour necrosis factor.
XX XX
PS Disclosure; Fig 16A; 87pp; English.
XX XX
CC An anti-TNF chimeric antibody may be administered for treating TNF-alpha mediated Crohn's disease in a human. The anti-TNF chimeric antibody competitively inhibits binding of TNF to monoclonal antibody CA2. The anti-TNF antibody does not bind to one or more epitopes in amino acids 11-13, 37-42, 49-57 or 155-157 of hTNF, but does bind to one or more epitopes included in amino acids between 87-108 or both 87-108 and 59-80 of hTNF. (Updated on 25-MAR-2003 to correct PF field.)
XX XX

SQ Sequence 107 AA;
Query Match 100.0%; Score 557; DB 2; Length 107;
Best Local Similarity 100.0%; Pred. No. 8.6e-38;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGVSSIHVYQORTNGSPRLLIKVASMSGIPS 60
Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGVSSIHVYQORTNGSPRLLIKVASMSGIPS 60

Qy 61 RFGSGSGTDTLSINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLSINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107

RESULT 2
ID AAW40820 standard; peptide; 107 AA.
XX AC AAW40820;
XX DT 02-APR-1998 (first entry)
XX DE Light chain variable region used in chimeric antibody.
XX KW Tumour necrosis factor; human; hTNF; rheumatoid arthritis; malignancy;
XX KW anti-TNF chimeric antibody; inhibitor; therapy; diagnosis; infection;
XX KW chronic inflammatory disease; autoimmune disease; light chain;
XX KW neurodegenerative disease; variable region.
XX OS Mus sp.
XX PN US5698195-A.
XX PD 16-DEC-1997.
XX PF 18-OCT-1994; 94US-00324799.
XX PR 18-MAR-1991; 91US-00670827.
XX PR 18-MAR-1992; 92US-00853606.
XX PR 11-SEP-1992; 92US-00943852.
XX PR 29-JAN-1993; 93US-00010406.
XX PR 02-FEB-1993; 93US-00013413.
XX PR 04-FEB-1994; 94US-00192061.
XX PR 04-FEB-1994; 94US-00192093.
XX PR 04-FEB-1994; 94US-00192102.
XX PA (CENZ) CENTOCOR INC.
XX PA (UNY-) UNIV NEW YORK MEDICAL CENT.
XX PI Siegel S, Knight D, Vilcek J, Ghayeb J, Le J, Daddona P;
XX WPI; 1998-051431/05.
XX DR N-PSDB; AAV03615.
XX PT Treatment of rheumatoid arthritis - with chimeric antibody directed
XX PT against tumour necrosis factor.
XX PS Claim 13; Col 99-100; 93pp; English.
XX This sequence represents the variable light chain of a mouse antibody.
XX This sequence can be used as part of the chimeric antibody used in the
XX method of the invention. The method of the invention is for treating
XX rheumatoid arthritis in a human, and comprises administering to the human
XX an effective tumour necrosis factor- (TNF) inhibiting amount of an anti-
XX TNF chimeric antibody (Ab), where the anti-TNF chimeric Ab comprises a
XX non-human variable region or a TNF antigen binding portion of the
XX variable region, and a human constant region. The method can be used for
XX in vitro, in situ and/or in vivo diagnosis and/or treatment of animal
XX cells, tissues or pathologies associated with the presence of TNF. The
XX Abs used in the method can also be used for removing TNF from a solution
XX or cells, inhibiting one or more biological activities of TNF in vitro,
XX in situ or in vitro. Such removal can include treatment methods of the

CC invention for alleviating symptoms or pathologies involving TNF, such as
CC bacterial, viral or parasitic infections, chronic inflammatory diseases,
CC autoimmune diseases, malignancies and/or neurodegenerative diseases
SQ Sequence 107 AA;
Query Match 100.0%; Score 557; DB 2; Length 107;
Best Local Similarity 100.0%; Pred. No. 8.6e-38;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGVSSIHVYQORTNGSPRLLIKVASMSGIPS 60
Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGVSSIHVYQORTNGSPRLLIKVASMSGIPS 60

Qy 61 RFGSGSGTDTLSINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLSINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107

RESULT 3
ID AAY23243 standard; protein; 107 AA.
XX AC AAY23243;
XX DT 27-AUG-1999 (first entry)
XX DE Light chain variable region of monoclonal antibody cA2.
XX KW Human tumour necrosis factor-alpha; TNF-alpha; immune disease;
XX KW TNF-alpha mediated disease; anti-TNF chimeric antibody;
XX KW monoclonal antibody cA2; autoimmune disease; inflammatory disease;
XX KW neurodegenerative disorder; cerebellar cortical degeneration;
XX KW multiple system degeneration; multi-system disorder; Senile Dementia;
XX KW amyotrophic lateral sclerosis; spinal muscular atrophy;
XX KW Alzheimer's disease; Down's Syndrome; Diffuse Lewy body disease;
XX KW Wernicke-Korsakoff syndrome; chronic alcoholism;
XX KW Lymphoma Creutzfeldt-Jakob disease;
XX KW sub-acute sclerosing panencephalitis; Hallerorden-Spatz disease;
XX KW dementia pugilistica; leukemia.
XX OS Mus sp.
XX PN US5919452-A.
XX PD 06-JUL-1999.
XX PF 04-FEB-1994; 94US-00192861.
XX PR 18-MAR-1991; 91US-00670827.
XX PR 18-MAR-1992; 92US-00853606.
XX PR 11-SEP-1992; 92US-00943852.
XX PR 29-JAN-1993; 93US-00010406.
XX PR 02-FEB-1993; 93US-00013413.
XX PA (CENZ) CENTOCOR INC.
XX PA (UNY) UNIV NEW YORK STATE.
XX PI Daddona P, Le J, Ghayeb J, Knight D, Seigal S, Vilcek J;
XX WPI; 1999-403943/34.
XX DR N-PSDB; AAX81705.
XX PT Treatment of tumor necrosis factor-alpha mediated disease using chimeric
XX PT antibodies.
XX PS Claim 6; Fig 16A; 90pp; English.
XX The present sequence represents the light chain variable region of
XX monoclonal antibody cA2. The specification describes a method for
XX treating tumour necrosis factor-alpha (TNF-alpha) mediated disease (not
XX resulting from infection) using an anti-TNF chimeric antibody that
XX inhibits the binding of TNF to monoclonal antibody cA2. The methods and

CC chimeric antibodies are useful for treating and/or diagnosing TNF-alpha
 CC mediated diseases such as immune and autoimmune pathologies e.g.
 CC rheumatoid arthritis and especially systemic lupus erythematosus (SLE),
 CC thyroiditis, graft versus host disease, scleroderma, diabetes mellitus,
 CC and Graves' disease; inflammatory diseases (other than septic shock),
 CC neurodegenerative disorders, cerebellar cortical degenerations, multiple
 CC systems degenerations (e.g. Mence, Dejerine-Thomas, Shi-Drager, and
 CC Machado-Joseph), Refsum's disease, abetalipoproteinemia, ataxia,
 CC telangiectasia, mitochondrial multi-system disorder, amyotrophic lateral
 CC sclerosis, infantile and juvenile spinal muscular atrophy, Alzheimer's
 CC disease, Down's Syndrome in middle age, Diffuse Lewy body disease, Senile
 CC dementia of Lewy body type, Wernicke-Korsakoff syndrome, chronic
 CC alcoholism, Creutzfeldt-Jakob disease, sub-acute sclerosing
 CC paranecephalitis, Hallerorden-Spatz disease, dementia pugilistica,
 CC leukemias, lymphomas, other TNF-secreting tumors or alcohol-induced
 CC hepatitis
 XX
 SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 2; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHWTQORTNGSPRLLIKAYESMSGIPS 60

DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHWTQORTNGSPRLLIKAYESMSGIPS 60

QY 61 RFGSGSGTDFTLINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

DB 61 RFGSGSGTDFTLINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

RESULT 4

AAE10849
 ID AAG79125 standard; protein; 107 AA.

AC AAG79125;

DT 11-SEP-2003 (revised)

DT 03-JAN-2002 (first entry)

DE Amino acid sequence of cloned cA2 light chain variable region.

KW Human; tumour necrosis factor-alpha; TNF-alpha; chimeric antibody;
 KW immunoglobulin; inflammation; cancer; cachexia; sepsis; endotoxin shock;
 KW infection; chronic inflammatory disease; auto-immune disease; malignancy;
 KW neurodegenerative disease; Crohn's disease; rheumatoid arthritis; A2;
 KW vascular endothelial growth factor; VEGF; VEGF-mediated disease.

OS Mus sp.

OS Homo sapiens.

OS Chimeric.

XX Key Location/Qualifiers

FT Misc-difference 90

FT /note= "Gln encoded by GAA"

XX US2001027249-A1.

PN 04-OCT-2001.

XX 08-JAN-2001; 2001US-00756301.

XX 18-MAR-1991; 91US-00670827.

PR 18-MAR-1992; 92US-00853606.

PR 11-SEP-1992; 92US-00943852.

PR 29-JAN-1993; 93US-00010406.

PR 02-FEB-1993; 93US-00013413.

PR 04-FEB-1994; 94US-00192093.

PR 04-FEB-1994; 94US-00192102.

PR 04-FEB-1994; 94US-00192861.

PR 18-OCT-1994; 94US-00324799.

PR 11-DEC-1995; 95US-00570674.

PR 12-AUG-1998; 98US-00133119.
 XX (CENZ) CENTOCOR INC.
 PA
 XX
 XI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX
 DR WPI; 2001-615872/71.
 XX N-PSDB; AAE165695.
 DR
 XX New chimeric antibody binding an epitope specific for human tumor
 PT necrosis factor alpha useful in treatment and diagnosis of tumor necrosis
 PT factor alpha related conditions e.g. Crohn's disease.
 XX
 PS Claim 40; Fig 16A; 93pp; English.
 XX

CC The present sequence represents the light chain variable region of a
 CC chimeric human-murine A2 antibody (cA2) which binds to epitopes of human
 CC tumour necrosis factor (TNF)-alpha. Chimeric antibodies of the invention
 CC comprise at least part of a human immunoglobulin constant region and at
 CC least part of a non-human immunoglobulin variable region. The chimeric
 CC antibodies are useful in vivo diagnosis and therapy of TNF-alpha-mediated
 CC pathologies and conditions. This is also useful as TNF is known to be
 CC involved in e.g. pro-inflammatory actions, wasting associated with cancer
 CC and other diseases (cachexia), gram-negative sepsis and endotoxin shock.
 CC Antibodies can be used to treat and/or diagnose bacterial, parasitic or
 CC viral infections, chronic inflammatory diseases, auto-immune diseases,
 CC malignancies and neurodegenerative diseases (such as Crohn's disease and
 CC rheumatoid arthritis). As inhibition or antagonism of TNF also decreases
 CC the expression of vascular endothelial growth factor (VEGF), the
 CC antibodies are also useful to treat VEGF-mediated diseases. (Updated on
 CC 11-SEP-2003 to standardise OS field)

XX Sequence 107 AA;

Query Match 100.0%; Score 557; DB 4; Length 107;

Best Local Similarity 100.0%; Pred. No. 8.6e-38;

Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHWTQORTNGSPRLLIKAYESMSGIPS 60

DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHWTQORTNGSPRLLIKAYESMSGIPS 60

QY 61 RFGSGSGTDFTLINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

DB 61 RFGSGSGTDFTLINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

RESULT 5

AAE10849

ID AAE10849 standard; protein; 107 AA.

XX AAE10849;

XX 18-DEC-2001 (first entry)

XX Mouse light chain variable region of chimeric A2 anti-TNF antibody.

KW Human; tumour necrosis factor; antifungal; antiviral; leukaemia;
 KW antiparasitic; immune disorder; autoimmune disorder; infection;
 KW systemic lupus erythematosus; rheumatoid arthritis; antibacterial;
 KW inflammatory disease; ulcerative colitis; neurodegenerative disease;
 KW multiple sclerosis; cerebellar disorder; alcohol-induced hepatitis;
 KW lymphoma; mouse; anti-TNF antibody; light chain variable region;
 KW chimeric; TNF alpha.

XX Mus sp.

XX US6284471-B1.

XX 04-SEP-2001.

XX 04-FEB-1994; 94US-00192093.

XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 XX (UUNY-) UNIV NEW YORK MEDICAL CENT.
 PA (CENZ) CENTOCOR INC.
 XX Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel SA;
 DR WPI; 2001-595467/67.
 DR N-PSDB; RAD18192.
 XX Chimeric anti-tumor necrosis factor (TNF) antibodies useful for
 PT diagnosing or treating TNF-associated pathologies or conditions, e.g.
 PT chronic and acute immune, autoimmune disorders, and microbial infections.
 XX Claim 8; Fig 16A; 87pp; English.
 XX The invention relates to chimeric anti-tumor necrosis factor (TNF)
 CC antibodies. These chimeric antibodies comprises two light chains and two
 CC heavy chains, each of the chains comprising at least part of a human
 CC immunoglobulin (Ig) constant region and at least part of a non-human Ig
 CC variable region, where the antibodies are capable of binding an epitope
 CC specific for human TNF-alpha. Anti-TNF antibodies or peptides may be used
 CC in research, therapeutic and diagnostic methods, specifically for
 CC diagnosing and/or treating animals or human having pathologies or
 CC conditions associated with the presence of a substance reactive with an
 CC anti-TNF antibody. TNF-related pathologies include acute and chronic
 CC immune and autoimmune disorders (e.g. systemic lupus erythematosus,
 CC rheumatoid arthritis), infections (e.g. bacterial, viral, fungal or
 CC parasitic infections), inflammatory diseases (e.g. ulcerative colitis,
 CC Crohn's pathology), neurodegenerative diseases (e.g. multiple sclerosis,
 CC chorea or senile chorea, disorders of the basal ganglia or cerebellar
 CC disorders), malignant pathologies (e.g. leukaemia, lymphomas), or alcohol
 CC induced hepatitis. The anti-TNF peptide or antibodies may also be used
 CC for immunoassays, which detect or quantitate TNF or anti-TNF antibodies.
 CC The present sequence is mouse light chain variable region of chimeric A2
 CC anti-TNF antibody
 XX Sequence 107 AA;
 SQ
 Query Match 100.0%; Score 557; DB 4; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQQTNGSPRLIKYASEMSGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQQTNGSPRLIKYASEMSGIPS 60
 Qy 61 RFGSGSGTDTLTLINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDTLTLINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
 RESULT 6
 AAG67762
 ID AAG67762 standard; protein; 107 AA.
 XX AAG67762;
 AC AAG67762;
 XX 10-DEC-2001 (first entry)
 DT Anti-TNF antibody cA2 light chain variable region.
 XX Human; tumour necrosis factor; TNF; anti-TNF antibody; cA2; infection;
 KW sepsis; cachexia; acquired immunodeficiency syndrome; AIDS; septic shock;
 KW chronic inflammatory disease; disseminated intravascular coagulation;
 KW atherosclerosis; ulcerative colitis; chronic inflammatory bowel disease;
 KW autoimmune disease; rheumatoid arthritis; diabetes mellitus;
 KW graft versus host disease; Grave's disease; alcohol-induced hepatitis;
 XX

KW malignancy; neurodegenerative disease; multiple sclerosis;
 KW demyelinating disease; acute transverse myelitis;
 KW vascular endothelial growth factor-mediated disease;
 XX VEGF-mediated disease.
 OS Mus sp.
 XX US6277969-B1.
 PN 21-AUG-2001.
 PD 12-AUG-1998; 98US-00133119.
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 18-OCT-1994; 94US-00192861.
 PR 11-DEC-1995; 95US-00570674.
 XX (UUNY) UNIV NEW YORK STATE.
 PA (CENZ) CENTOCOR INC.
 PA (UUNY-) UNIV NEW YORK MEDICAL CENT.
 XX Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;
 DR WPI; 2001-589328/66.
 DR N-PSDB; AAH78592.
 XX New nucleic acid molecule encoding heavy or light chain variable regions
 PT of anti-tumor necrosis factor antibody, useful for alleviating symptoms
 PT or pathologies involving tumor necrosis factor.
 XX Claim 3; Fig 16A; 94pp; English.
 XX The present sequence represents the cloned light chain variable region of
 CC antibody cA2, which is directed against tumour necrosis factor (TNF). The
 CC specification describes anti-TNF antibodies, such as cA2. The anti-TNF
 CC antibody is useful for alleviating symptoms or pathologies involving TNF,
 CC such as bacterial, viral or parasitic infections (e.g. sepsis, cachexia,
 CC acquired immunodeficiency syndrome (AIDS) and septic shock), chronic
 CC inflammatory diseases (disseminated intravascular coagulation, bowel
 CC atherosclerosis, ulcerative colitis and chronic inflammatory bowel
 CC disease), autoimmune diseases (e.g. rheumatoid arthritis, diabetes
 CC mellitus, graft versus host disease and Grave's disease), alcohol-induced
 CC hepatitis, malignancies and/or neurodegenerative diseases (e.g. multiple
 CC sclerosis, demyelinating diseases and acute transverse myelitis). The
 CC anti-TNF antibody is also useful in the treatment of vascular endothelial
 CC growth factor (VEGF)-mediated diseases
 XX Sequence 107 AA;
 SQ
 Query Match 100.0%; Score 557; DB 4; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQQTNGSPRLIKYASEMSGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQQTNGSPRLIKYASEMSGIPS 60
 Qy 61 RFGSGSGTDTLTLINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDTLTLINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
 RESULT 7
 AAG70572
 ID AAG70572 standard; protein; 107 AA.
 XX

AC ABG70572;
 XX 28-NOV-2002 (first entry)
 DT Human-murine chimeric anti-hTNFalpha cA2 light chain variable region.
 DE
 XX
 XX Human; tumour necrosis factor-alpha; TNFalpha; anti-TNF antibody;
 KW anti-TNF peptide; neurodegenerative disease; multiple sclerosis;
 KW acquired immunodeficiency syndrome; AIDS; demyelinating disease;
 KW acute transverse myelitis; extrapyramidal disorder; lesion;
 KW cerebellar disorder; basal ganglia disorder; Huntington's chorea;
 KW movement disorder; senile chorea; Parkinson's disease; spinal ataxia;
 KW progressive supranuclear palsy; spinocerebellar degeneration;
 KW systemic disorder; neurogenic muscular atrophy; Down's Syndrome;
 KW amyotrophic lateral sclerosis; Alzheimer's disease; chronic alcoholism;
 KW Creutzfeldt-Jakob disease; Hallervorden-Spatz disease; neuroleptic;
 KW neurotropic; neuroprotective; antiparkinsonian; human TNFalpha; hTNFalpha;
 KW murine; mouse; cA2; chimeric A2; light chain variable region; mutant;
 KW antihuman TNF IgG1 antibody; IgG1 kappa; mutein.
 XX
 OS Homo sapiens.
 OS Mus sp.
 OS Synthetic.
 OS Chimeric.
 XX US2002106372-A1.
 PN
 XX 08-AUG-2002.
 PD
 XX 18-JAN-2001; 2001US-00766535.
 PF
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 12-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.
 XX (UUNY-) UNIV NEW YORK MEDICAL CENT.
 XX
 XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 PI WPI; 2002-740091/80.
 XX N-PSDB; ABV73814.
 DR
 XX
 XX Treating a neurodegenerative disease, especially multiple sclerosis,
 PT comprises administering an anti-tumor necrosis factor monoclonal antibody
 PT or its fragment.
 XX
 XX Disclosure; Fig 16A; 95pp; English.
 PS
 XX The present invention relates to anti-tumor necrosis factor (TNF)
 CC antibodies, and anti-TNF peptides, which are specific for human tumor
 CC necrosis factor-alpha (TNFalpha). Methods of producing and using the anti
 CC -TNF antibodies and anti-TNF peptides are also disclosed. The anti-TNF
 CC antibodies, anti-TNF peptides and methods of the invention are useful for
 CC treating human neurodegenerative diseases (e.g. multiple sclerosis,
 CC acquired immunodeficiency syndrome (AIDS) dementia complex, a
 CC demyelinating disease, acute transverse myelitis, an extrapyramidal
 CC disorder, a cerebellar disorder, a lesion of the corticospinal system, a
 CC disorder of the basal ganglia, a hyperkinetic movement disorder,
 CC Huntington's chorea, senile chorea, a drug-induced movement disorder, a
 CC hypokinetic movement disorder, Parkinson's disease, progressive
 CC supranuclear palsy, a structural lesion of the cerebellum, a
 CC spinocerebellar degeneration, spinal ataxia, Friedreich's ataxia, a
 CC cerebellar cortical degeneration, a multiple systems degeneration, a
 CC systemic disorder, Refsum's disease, abetalipoproteinemia, ataxia
 CC telangiectasia, a mitochondrial multi-system disorder, demyelinating core

CC disorder, acute transverse myelitis, a disorder of the motor unit, a
 CC neurogenic muscular atrophy, anterior horn cell degeneration, amyotrophic
 CC lateral sclerosis, infantile spinal muscular atrophy, juvenile spinal
 CC muscular atrophy, Alzheimer's disease, Down's Syndrome, a diffuse Lewy
 CC body disease, senile dementia of Lewy body type, Wernicke-Korsakoff
 CC syndrome, chronic alcoholism, Creutzfeldt-Jakob disease, subacute
 CC sclerosing panencephalitis, Hallervorden-Spatz disease, or dementia
 CC pugilistica). The present sequence represents human-murine chimeric anti-
 CC human TNFalpha (hTNFalpha) chimeric A2 (cA2) light chain variable region.
 CC The cA2 monoclonal anti-TNF antibody consists of mouse (from female
 CC BALB/c mice) antihuman TNF IgG1 antibody (designated A2), and the
 CC constant regions of human IgG1 kappa
 XX Sequence 107 AA;
 SQ
 Query Match 100.0%; Score 557; DB 5; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQQQTNGSPRLIIKYASEMSGIPS 60
 DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQQQTNGSPRLIIKYASEMSGIPS 60
 QY 61 RPSGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 DB 61 RPSGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 RESULT 8
 ABP54870
 ID ABP54870 standard; protein; 107 AA.
 XX AC ABP54870;
 XX 08-JAN-2003 (first entry)
 DT Murine anti-TNF antibody light chain variable region.
 DE
 XX Tumour necrosis factor; monoclonal antibody; chimeric antibody; antibody;
 KW myelodysplastic syndrome; cytostatic; vaccine.
 XX
 XX Mus musculus.
 XX US2002114805-A1.
 PN
 XX 22-AUG-2002.
 PD
 XX 07-DEC-2001; 2001US-00010229.
 PF
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.
 XX (UUNY-) UNIV NEW YORK MEDICAL CENT.
 XX
 XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 PI WPI; 2002-740091/80.
 XX N-PSDB; ABV73814.
 DR
 XX
 XX Treating myelodysplastic syndrome in human, involves administering tumor
 PT necrosis factor-inhibiting amount of an anti-TNF antibody, monoclonal
 PT antibody cA2 or anti-TNF chimeric antibody.

XX PS Claim 7; Page 56; 97pp; English.

XX CC The present sequence is the protein sequence of the light chain variable region (VL) of an anti-human tumour necrosis factor (TNF) monoclonal antibody (Wab) produced by murine hybridoma line A2. A claimed method of treating a myelodysplastic syndrome in a human comprises administering an anti-TNF chimeric antibody comprising the murine A2 VL and VH (see ABP54871) regions and an IgG1 human constant region. The anti-TNF peptides and antibodies of the invention can be used in the treatment of TNF-related pathologies such as acute and chronic immune and autoimmune pathologies, infections, inflammatory diseases, neurodegenerative diseases, malignant pathologies, and alcohol-induced hepatitis

XX SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 5; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLLIKVASMSGIPS 60
 DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLLIKVASMSGIPS 60

QY 61 RFGSGSGTDTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 DB 61 RFGSGSGTDTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107

RESULT 9
 AAB47941
 ID AAB47941 standard; protein; 107 AA.
 AC AAB47941;
 XX
 XX 29-AUG-2003 (revised)
 DT 10-JUN-2002 (first entry)
 XX
 XX Chimeric antibody, CA2, VL.
 XX
 XX Human; tumour necrosis factor; TNF; chimeric; antibody; CA2; psoriasis;
 XX immunoglobulin; G1.
 OS Homo sapiens.
 OS Mus musculus.
 OS Chimeric.
 XX
 XX US2002022720-A1.
 XX
 XX 21-FEB-2002.
 XX
 XX 10-AUG-2001; 2001US-00927703.
 XX
 XX 18-MAR-1991; 91US-00670827.
 XX 18-MAR-1992; 92US-00853606.
 XX 11-SEP-1992; 92US-00943852.
 XX 29-JAN-1993; 93US-00010406.
 XX 02-FEB-1993; 93US-00013413.
 XX 04-FEB-1994; 94US-00192093.
 XX 04-FEB-1994; 94US-00192093.
 XX 18-OCT-1994; 94US-00324799.
 XX 11-DEC-1995; 95US-00570674.
 XX 12-AUG-1998; 98US-00133119.
 XX 08-JAN-2001; 2001US-00756398.
 XX
 XX (UYNV-) UNIV NEW YORK MEDICAL CENT.
 XX
 XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 PI WPI; 2002-255676/30.
 XX
 XX N-PSDB; AAI72609.
 DR
 XX

PT Treating psoriasis in humans comprises administering anti-tumor necrosis factor (TNF) chimeric antibody CA2, or anti-TNF chimeric antibody which competitively inhibits binding of TNF to the antibody CA2.

PT XX Claim 7; Fig 16A; 97pp; English.

PS CC The sequences given in AAB47941-42 show the light and heavy chain variable regions of the chimeric antibody, CA2. CA2 is an anti-tumour necrosis factor (TNF) antibody. Anti-human TNF chimeric antibodies, may be used for treating psoriasis in humans. Psoriasis may be treated by administering: (a) anti-TNF chimeric antibody (Ab) which competitively inhibits binding of TNF to monoclonal chimeric Ab CA2; or (b) anti-TNF chimeric Ab comprising a human immunoglobulin (Ig)G1 constant region and a non-human variable region, which binds to an epitope included in amino acids 87 - 108 or both 59 - 80 and 87 - 108 of a TNF sequence. The CA2 antibody has potent TNF-inhibiting and/or neutralizing activity. Levels of CA2 as low as 125 ng/ml completely abolished the toxic activity of TNF. The CA2 exhibited greater TNF-inhibiting activity and/or neutralizing activity than did the parent murine A2 monoclonal antibody. (Updated on 29-AUG-2003 to standardise OS field)

XX SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 5; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLLIKVASMSGIPS 60
 DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLLIKVASMSGIPS 60

QY 61 RFGSGSGTDTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 DB 61 RFGSGSGTDTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107

RESULT 10
 ABU09889
 ID ABU09889 standard; protein; 107 AA.
 AC ABU09889;
 XX
 XX 11-AUG-2003 (first entry)
 DT
 XX Mouse TNF-alpha antibody CA2 light chain variable region.
 XX
 XX Mouse; TNF-alpha; tumour necrosis factor-alpha; gene therapy; malignancy;
 KW TNF-alpha-mediated pathology; bacterial infection; viral infection;
 KW parasitic infection; chronic inflammatory disease; rheumatoid arthritis;
 KW systemic lupus erythematosus; Crohn's disease; ulcerative colitis;
 KW autoimmune disease; diabetes mellitus; Grave's disease; vascular disease;
 KW neurodegenerative disease; Alzheimer's disease; light chain; antibody.
 XX
 XX Mus sp.
 OS
 XX US2003017584-A1.
 XX
 XX 23-JAN-2003.
 XX
 XX 08-JAN-2001; 2001US-00756398.
 XX
 XX 18-MAR-1991; 91US-00670827.
 XX 18-MAR-1992; 92US-00853606.
 XX 11-SEP-1992; 92US-00943852.
 XX 29-JAN-1993; 93US-00010406.
 XX 02-FEB-1993; 93US-00013413.
 XX 04-FEB-1994; 94US-00192093.
 XX 04-FEB-1994; 94US-00192102.
 XX 04-FEB-1994; 94US-00192861.
 XX 18-OCT-1994; 94US-00324799.
 XX 11-DEC-1995; 95US-00570674.
 XX 12-AUG-1998; 98US-00133119.
 XX

PA (CENZ) CENTOCOR INC.
 XX
 PI Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;
 XX
 DR WPI; 2003-401678/38.
 DR N-PSDB; ACA61152.
 XX
 PT New nucleic acid molecule for diagnosing or treating tumor necrosis
 PT factor alpha-mediated diseases, e.g. infections, chronic inflammatory
 PT diseases, autoimmune diseases, cancer or neurodegenerative diseases.
 XX
 PS Claim 4; Fig 16A; 100pp; English.
 XX
 CC The invention relates to an isolated nucleic acid molecule that encodes a
 CC tumour necrosis factor-alpha (TNF-alpha) specific antibody. The nucleic
 CC acid molecule is useful in diagnosing and/or treating TNF-alpha-mediated
 CC pathologies and conditions, such as bacterial, viral or parasitic
 CC infections, chronic inflammatory diseases (e.g. rheumatoid arthritis,
 CC Crohn's disease or ulcerative colitis), autoimmune diseases (e.g.
 CC systemic lupus erythematosus, diabetes mellitus or Grave's disease),
 CC malignancies, vascular diseases and/or neurodegenerative diseases (e.g.
 CC Alzheimer's disease) and in research purposes. The present sequence
 CC represents the amino acid sequence of the mouse TNF-alpha antibody cA2
 CC light chain variable region
 XX
 SQ Sequence 107 AA;
 Query Match 100.0%; Score 557; DB 6; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPG 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPG 60
 Qy 61 RFGSGSGTDFTLISINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLISINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 RESULT 11
 ABG72948
 ID ABG72948 standard; protein; 107 AA.
 XX
 AC ABG72948;
 XX
 DT 03-APR-2003 (first entry)
 XX
 DE Chimeric A2 (cA2) antibody light chain variable region.
 XX
 KW Human; tumour necrosis factor; TNF; antibacterial; immunosuppressive;
 KW tumour necrosis factor inhibitor; bacterial infection; cA2; sepsis;
 KW endothelial damage; vascular damage; severe hypotension;
 KW disseminated intravascular coagulation; shock; inflammation; bacteraemia;
 KW chimeric A2 antibody; cA2; light chain variable region.
 XX
 OS Synthetic.
 XX
 XX US2002141996-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 10-JAN-2002; 2002US-00043450.
 XX
 PR 18-MAR-1991; 91US-00570827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.

PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.
 XX
 PA (UYNY-) UNIV NEW YORK MEDICAL CENT.
 PA (CENZ) CENTOCOR INC.
 XX
 PI Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;
 XX
 DR WPI; 2003-174129/17.
 DR N-PSDB; ABX14786.
 XX
 PT Treating bacterial infection in a human comprises administering to the
 PT human a tumor necrosis factor (TNF)-inhibiting amount of an anti-TNF
 PT chimeric antibody, which competitively inhibits binding of TNF to
 PT monoclonal antibody cA2.
 XX
 PS Claim 11; Fig 16A; 97pp; English.
 XX
 CC The invention describes a method of treating bacterial infection in a
 CC human comprising administering to the human a tumour necrosis factor
 CC (TNF)-inhibiting amount of an anti-TNF chimeric antibody, which
 CC competitively inhibits binding of TNF to monoclonal antibody cA2. The
 CC methods are useful for treating bacterial infections, a pathology
 CC associated with a sepsis (e.g. endothelial damage, vascular damage,
 CC disseminated intravascular coagulation or severe hypotension), shock
 CC resulting from bacterial infection, or inflammatory reaction resulting
 CC from bacteraemia. The anti-TNF antibodies and peptides in the form of
 CC pharmaceutical and/or diagnostic compounds are useful for diagnosing and
 CC treating TNF-related pathologies. This is the amino acid sequence of the
 CC chimeric A2 (cA2) antibody light chain variable region
 XX
 SQ Sequence 107 AA;
 Query Match 100.0%; Score 557; DB 6; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPG 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPG 60
 Qy 61 RFGSGSGTDFTLISINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLISINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 RESULT 12
 ABG75766
 ID ABG75766 standard; protein; 107 AA.
 XX
 AC ABG75766;
 XX
 DT 29-APR-2003 (first entry)
 XX
 DE cA2 variable light chain of the TNFalpha antibody.
 XX
 XX Mouse; TNFalpha; humanised antibody; tumour necrosis factor-alpha;
 KW antigen; constant region; heavy chain; light chain;
 KW antigen binding region; complementarity determining region; CDR; A2; cA2;
 KW framework region; cytokine; TNF; pro-inflammatory; tissue injury;
 KW procoagulant; vascular endothelial cell; neutrophil; lymphocyte;
 KW platelet activating factor; macrophage; immune disorder; scleroderma;
 KW autoimmune disorder; rheumatoid arthritis; thyroidosis; diabetes;
 KW graft versus host disease; Grave's disease; infection; AIDS;
 KW inflammatory disease; sarcoidosis; chronic inflammatory bowel disease;
 KW ulcerative colitis; Crohn's disease; atherosclerosis; dementia;
 KW neurodegenerative disease; multiple sclerosis; Parkinson's disease;
 KW Alzheimer's disease; cancer; hepatitis; ocular neovascularisation;
 KW psoriasis; duodenal ulcer; angiogenesis; female reproductive tract;
 KW immunosuppressive; dermatological; anti-HIV; antiarteriosclerotic;
 KW neuroprotective; nootropic; cytostatic; gynecological.

XX OS Mus musculus.
XX PN US2002132307-A1.
XX PD 19-SEP-2002.
XX PF 08-JAN-2001; 2001US-00756161.
XX PR 12-AUG-1998; 98US-00133119.
XX PA (UNYV) UNIV NEW YORK STATE.
PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2003-237899/23.
DR N-PSDB; ABX11349.
XX New humanized anti-TNF antibody with an antigen binding region, useful
PT for diagnosing and treating TNF-related pathologies, such as autoimmune
PT disorders, bacterial and viral infections, inflammatory diseases, AIDS
PT and cancer.
XX Claim 19; Fig 16A; 98pp; English.
XX The invention discloses a new humanised antibody, or its antigen-binding
XX fragment, that selectively binds human tumour necrosis factor- α
XX (TNF α), comprising an antigen binding region of non-human origin and
XX at least a portion of an antibody of human origin. The antibody consists
XX of a constant region heavy or light chain of human origin and an antigen
XX binding region, comprising complementarity determining regions (CDRs)
XX derived from an antibody of murine origin that binds to human TNF- α
XX (A2 or cA2), and a framework region derived from a heavy or light chain
XX of human origin. Also disclosed is an expression vector comprising a
XX fused gene encoding the humanised antibody, or its antigen-binding
XX fragment, and the method for preparing it. The cytokine TNF causes pro-
XX inflammatory actions which result in tissue injury, such as inducing
XX procoagulant activity on vascular endothelial cells, increasing the
XX adherence of neutrophils and lymphocytes and stimulating the release of
XX platelet activating factor from macrophages, neutrophils and vascular
XX endothelial cells. The methods are useful for preparing a humanised
XX antibody, and antigen-binding fragment, and manufacturing a polypeptide.
XX The methods and compositions are also useful for the diagnosis and
XX treatment of TNF-related pathologies, such as acute and chronic immune
XX and autoimmune disorders (rheumatoid arthritis, thyroiditis, Crohn's disease
XX and host disease, scleroderma, diabetes and Grave's disease), bacterial and
XX viral infections including AIDS, inflammatory diseases (sarcoidosis,
XX chronic inflammatory bowel disease, ulcerative colitis, Crohn's disease
XX and atherosclerosis), neurodegenerative diseases (multiple sclerosis,
XX Parkinson's disease, dementia and Alzheimer's disease), cancer,
XX hepatitis, ocular neovascularisation, psoriasis, duodenal ulcers and
XX angiogenesis of the female reproductive tract. The sequence presented is
XX the murine cA2 variable light chain of the TNF α antibody
XX
SQ Sequence 107 AA;
Query Match 100.0%; Score 557; DB 6; Length 107;
Best Local Similarity 100.0%; Pred. No. 8.6e-38;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DILLTQSPAILSVSGERVSFSCRASQFVGSSIHVYQORTNGSPRLIKYASMSGIPS 60
Db 1 DILLTQSPAILSVSGERVSFSCRASQFVGSSIHVYQORTNGSPRLIKYASMSGIPS 60
QY 61 RFGSGSGTDFTLININVESEDIADYYCQOSHWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDFTLININVESEDIADYYCQOSHWPFTFGSGTNLEVK 107
RESULT 13
ID ABG75773 standard; protein; 107 AA.
XX

AC ABG75773;
XX 29-APR-2003 (first entry)
XX cA2 variable light chain of the TNF α antibody.
XX Mouse; tumour necrosis factor α ; TNF α ; rheumatoid arthritis;
XX TNF inhibitor; ankylosis; anti-TNF antibody; cA2; immunoglobulin G1;
XX Ig G1; TNF; heavy chain; light chain; antigen binding; CDR;
XX complementarity determining region; framework region; cytokine;
XX pro-inflammatory; tissue injury; procoagulant; vascular endothelial cell;
XX neutrophil; lymphocyte; platelet activating factor; macrophage;
XX immune disorder; autoimmune disorder; rheumatoid arthritis; thyroiditis;
XX graft versus host disease; scleroderma; diabetes; Grave's disease;
XX infection; AIDS; inflammatory disease; sarcoidosis;
XX chronic inflammatory bowel disease; ulcerative colitis; Crohn's disease;
XX atherosclerosis; neurodegenerative disease; multiple sclerosis;
XX Parkinson's disease; dementia Alzheimer's disease; cancer; hepatitis;
XX ocular neovascularisation; psoriasis; duodenal ulcer; angiogenesis;
XX female reproductive tract; haemodynamic; febrile; allergic episode.
XX Mus musculus.
XX US2002146419-A1.
XX 10-OCT-2002.
XX 10-JAN-2002; 2002US-00044534.
XX 18-MAR-1991; 91US-00670827.
XX 18-MAR-1992; 92US-00853606.
XX 11-SEP-1992; 92US-00943852.
XX 29-JAN-1993; 93US-00010406.
XX 02-FEB-1993; 93US-00013413.
XX 04-FEB-1994; 94US-00192093.
XX 04-FEB-1994; 94US-00192102.
XX 04-FEB-1994; 94US-00192861.
XX 18-OCT-1994; 94US-00324799.
XX 11-DEC-1995; 95US-00570674.
XX 12-AUG-1998; 98US-00133119.
XX 08-JAN-2001; 2001US-00756398.
XX 10-AUG-2001; 2001US-00927703.
XX (UNYV-) UNIV NEW YORK MEDICAL CENT.
XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2003-255124/25.
XX N-PSDB; ABX11365.
XX Treating ankylosis in a human, comprises administering a tumor necrosis
XX factor (TNF)-inhibiting amount of anti-TNF chimeric antibody.
XX Claim 7; Fig 16A; 97pp; English.
XX The invention discloses a method for treating ankylosis, by administering
XX a tumour necrosis factor (TNF)-inhibiting anti-TNF chimeric antibody
XX which competitively inhibits binding of TNF to the murine monoclonal
XX antibody cA2, where the antibody comprises an immunoglobulin (Ig) G1
XX constant region and binds to an epitope of human TNF. The antibody
XX consists of a constant region heavy or light chain of human origin and an
XX antigen binding region, comprising complementarity determining regions
XX (CDRs) derived from an antibody of murine origin that binds to human
XX TNF α (A2 or cA2), and a framework region derived from a heavy or
XX light chain of human origin. The cytokine TNF causes pro-inflammatory
XX actions which result in tissue injury, such as inducing procoagulant
XX activity on vascular endothelial cells, increasing the adherence of
XX neutrophils and lymphocytes and stimulating the release of platelet
XX activating factor from macrophages, neutrophils and vascular endothelial
XX cells. The methods and compositions are also useful for the diagnosis and
XX treatment of ankylosis and TNF-related pathologies, such as acute and
XX chronic immune and autoimmune disorders (rheumatoid arthritis,
XX thyroiditis, graft versus host disease, scleroderma, diabetes and Grave's

CC disease), bacterial and viral infections including AIDS, inflammatory
 CC diseases (sarcoidosis, chronic inflammatory bowel disease, ulcerative
 CC colitis, Crohn's disease and atherosclerosis), neurodegenerative diseases
 CC (multiple sclerosis, Parkinson's disease, dementia and Alzheimer's
 CC disease), cancer, hepatitis, ocular neovascularisation, psoriasis,
 CC duodenal ulcers and angiogenesis of the female reproductive tract. The
 CC chimeric anti-TNF Mab was well-tolerated and involved no haemodynamic,
 CC febrile or allergic episodes. The sequence presented is the murine cA2
 CC variable light chain of the TNFalpha antibody
 XX
 SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 6; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
 QY 61 RFSGSGSGTDFTLISINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107
 Db 61 RFSGSGSGTDFTLISINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107

RESULT 14
 ABU63587
 ID ABU63587 standard; protein; 107 AA.

XX AC ABU63587;
 XX DT 06-NOV-2003 (first entry)
 XX DE Mouse cA2 light chain variable region.
 XX KW Mouse; tumour necrosis factor alpha; TNF alpha; immunomodulator;
 KW TNF-Antagonist; cachexia; cancer; HIV; AIDS;
 KW cA2 light chain variable region.
 XX OS Mus sp.

XX PN US2003054004-A1.
 XX PD 20-MAR-2003.
 XX PF 10-JAN-2002; 2002US-00043432.
 XX PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.
 XX PA (UNYNY-) UNIV NEW YORK MEDICAL CENT.
 XX PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX WPI; 2003-555374/52.
 DR N-PSDB; ACD28371.
 XX PT Treating cachexia, particularly a cachexia associated with cancer, HIV or
 PT AIDS comprising administering a tumor necrosis factor (TNF)-inhibiting
 XX amount of human-murine anti-TNF chimeric antibodies.
 XX Claim 7; Fig 16A; 97pp; English.

XX The invention describes a method of treating cachexia in a human
 CC comprising administering a tumour necrosis factor (TNF)-inhibiting amount
 CC of: (a) an anti-TNF chimeric antibody, which competitively inhibits
 CC binding of TNF to monoclonal antibody, (mAb) cA2; (b) chimeric anti-TNF
 CC antibody cA2; (c) at least one mAb cA2, or its TNF-binding fragment; or
 CC (d) an anti-TNF chimeric antibody with epitopic specificity identical to
 CC mAb cA2. Administering a TNF-inhibiting amount of an anti-TNF chimeric
 CC antibody which has epitopic specificity identical to mAb cA2 is useful
 CC for treating cachexia in humans, particularly a cachexia associated with
 CC cancer, HIV or AIDS. This is the amino acid sequence of mouse cA2 light
 CC chain variable region used in the creation of TNF alpha-antibody fusion
 CC proteins
 XX
 SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 6; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
 QY 61 RFSGSGSGTDFTLISINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107
 Db 61 RFSGSGSGTDFTLISINTVESEDIADYYCQOSHSPFTFGSGTNLEVK 107

RESULT 15
 ADC46570
 ID ADC46570 standard; protein; 107 AA.

XX AC ADC46570;
 XX DT 18-DEC-2003 (first entry)
 XX DE Mouse cA2 antibody light chain variable region polypeptide.
 XX KW Mouse; tumour necrosis factor-alpha; TNF-alpha; A2; cA2;
 KW complementarity determining region; bacterial infection; viral infection;
 KW fungal infection; parasitic infection; inflammatory disease; sarcoidosis;
 KW atherosclerosis; autoimmune disease; rheumatoid arthritis;
 KW systemic lupus erythematosus; neurodegenerative disease;
 KW Huntington's Chorea; Parkinson's disease; malignancy; lymphoma;
 KW carcinoma; alcohol-induced hepatitis; light chain variable region;
 KW antibody.

XX OS Mus sp.
 XX PN US2003144484-A1.
 XX PD 31-JUL-2003.
 XX PF 18-JUL-2002; 2002US-00198845.
 XX PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.

XX PA (UNYNY) UNIV NEW YORK STATE.
 XX PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX Claim 7; Fig 16A; 97pp; English.

DR WPI; 2003-744929/70.
 DR N-PSDB; ADC46569.
 XX
 PT New human anti-tumor necrosis factor (TNF) antibody or its antigen
 PT binding fragment that competitively inhibits binding of A2 or CA2 to
 PT human TNF-alpha, useful for diagnosing and treating TNF-alpha-mediated
 PT diseases, e.g. infection.
 XX
 PS Disclosure; SEQ ID NO 3; 97pp; English.
 XX
 CC The invention relates to a human anti-tumor necrosis factor (TNF)
 CC antibody or its antigen binding fragment that competitively inhibits
 CC binding of antibodies A2 or CA2 to human TNF-alpha. The invention also
 CC relates to a composition comprising the antibody or its antigen binding
 CC fragment and a carrier, a human light or heavy chain that specifically
 CC binds human TNF-alpha and competitively inhibits binding of A2 or CA2 to
 CC human TNF-alpha, the human light or heavy chain consisting of the
 CC complementarity determining regions of the light or heavy chain of A2 or
 CC CA2, and a human light or heavy chain framework region and an isolated
 CC nucleic acid that encodes the above human heavy or light chain. The
 CC antibody is useful in vivo diagnosis and therapy of TNF-alpha-mediated
 CC pathologies and conditions, such as infections (e.g. bacterial, viral,
 CC fungal or parasitic), inflammatory diseases (e.g. sarcoidosis,
 CC atherosclerosis), autoimmune diseases (e.g. rheumatoid arthritis,
 CC systemic lupus erythematosus), neurodegenerative diseases (e.g.
 CC Huntington's Chorea, Parkinson's disease), malignancies (e.g. lymphomas,
 CC carcinomas) and alcohol-induced hepatitis. This sequence represents the
 CC mouse CA2 antibody light chain variable region polypeptide.
 XX
 SQ Sequence 107 AA;

Query Match 100.0%; Score 557; DB 7; Length 107;
 Best Local Similarity 100.0%; Pred. No. 8.6e-38;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 1 DILLTQSPAILSVSPGSRVSPFCRASQFVGSSIHVYQQRNGSPRLLIKYASESMGIPS 60
 Qy 61 RFGSGSGTDTLTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDTLTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107

Search completed: December 15, 2004, 17:16:37
 Job time : 109.053 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 15, 2004, 17:10:19 ; Search time 27.4602 Seconds
(without alignments)
258.412 Million cell updates/sec

Title: US-09-897-724-3
Perfect score: 557
Sequence: 1 DILLTSPAILSVSPGRVS.....CQSHSWPPTFGSGTNLEVK 107

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
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5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|---------------------|--------------------|
| 1 | 557 | 100.0 | 107 | 1 US-08-192-102-3 | Sequence 3, Appli |
| 2 | 557 | 100.0 | 107 | 1 US-08-324-799-3 | Sequence 3, Appli |
| 3 | 557 | 100.0 | 107 | 2 US-08-192-861A-3 | Sequence 3, Appli |
| 4 | 557 | 100.0 | 107 | 3 US-08-133-119-3 | Sequence 3, Appli |
| 5 | 557 | 100.0 | 107 | 3 US-08-192-093A-3 | Sequence 3, Appli |
| 6 | 557 | 100.0 | 107 | 3 US-08-756-301B-3 | Sequence 3, Appli |
| 7 | 506 | 90.8 | 107 | 2 US-08-232-081B-40 | Sequence 40, Appli |
| 8 | 502 | 90.1 | 244 | 4 US-08-244-369B-1 | Sequence 1, Appli |
| 9 | 502 | 90.1 | 244 | 4 US-08-940-391-1 | Sequence 1, Appli |
| 10 | 500 | 89.8 | 239 | 2 US-07-956-399-4 | Sequence 4, Appli |
| 11 | 498 | 89.4 | 240 | 2 US-07-956-399-2 | Sequence 2, Appli |
| 12 | 496 | 89.0 | 106 | 1 US-08-326-362-4 | Sequence 4, Appli |
| 13 | 494 | 88.7 | 107 | 2 US-08-476-176B-4 | Sequence 4, Appli |
| 14 | 494 | 88.7 | 107 | 2 US-08-127-721A-4 | Sequence 4, Appli |
| 15 | 494 | 88.7 | 107 | 3 US-08-485-246A-4 | Sequence 4, Appli |
| 16 | 490 | 88.0 | 106 | 2 US-08-800-198-4 | Sequence 4, Appli |
| 17 | 490 | 88.0 | 106 | 3 US-08-296-595-4 | Sequence 4, Appli |
| 18 | 490 | 88.0 | 240 | 2 US-08-800-198-8 | Sequence 8, Appli |
| 19 | 490 | 88.0 | 240 | 3 US-09-296-595-8 | Sequence 8, Appli |
| 20 | 472 | 84.7 | 143 | 2 US-08-653-402B-8 | Sequence 8, Appli |
| 21 | 436 | 78.3 | 107 | 1 US-08-436-463-20 | Sequence 20, Appli |
| 22 | 436 | 78.3 | 109 | 1 US-07-942-245-4 | Sequence 4, Appli |
| 23 | 433 | 77.7 | 107 | 1 US-08-107-669D-1 | Sequence 1, Appli |
| 24 | 433 | 77.7 | 107 | 1 US-08-472-788A-1 | Sequence 1, Appli |
| 25 | 433 | 77.7 | 107 | 2 US-08-477-531B-1 | Sequence 1, Appli |
| 26 | 433 | 77.7 | 107 | 2 US-08-082-842A-1 | Sequence 1, Appli |
| 27 | 427 | 76.7 | 127 | 1 US-08-436-463-4 | Sequence 4, Appli |

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| 28 | 424 | 76.1 | 107 | 1 | US-07-634-278-62 | Sequence 62, Appli |
| 29 | 424 | 76.1 | 107 | 1 | US-08-477-728-62 | Sequence 62, Appli |
| 30 | 424 | 76.1 | 107 | 1 | US-08-474-040-62 | Sequence 62, Appli |
| 31 | 424 | 76.1 | 107 | 1 | US-08-487-200-62 | Sequence 62, Appli |
| 32 | 424 | 76.1 | 107 | 3 | US-08-484-537-62 | Sequence 62, Appli |
| 33 | 424 | 76.1 | 127 | 1 | US-07-634-278-63 | Sequence 83, Appli |
| 34 | 424 | 76.1 | 127 | 1 | US-08-477-728-83 | Sequence 83, Appli |
| 35 | 424 | 76.1 | 127 | 1 | US-08-474-040-83 | Sequence 83, Appli |
| 36 | 424 | 76.1 | 127 | 1 | US-08-487-200-83 | Sequence 83, Appli |
| 37 | 424 | 76.1 | 127 | 3 | US-08-484-537-83 | Sequence 6, Appli |
| 38 | 421 | 75.6 | 127 | 2 | US-08-476-176B-6 | Sequence 6, Appli |
| 39 | 421 | 75.6 | 127 | 3 | US-08-127-721A-6 | Sequence 6, Appli |
| 40 | 421 | 75.6 | 127 | 3 | US-08-485-246A-6 | Sequence 18, Appli |
| 41 | 420 | 75.4 | 127 | 1 | US-08-436-463-18 | Sequence 1, Appli |
| 42 | 419 | 75.2 | 108 | 3 | US-09-247-352-1 | Sequence 1, Appli |
| 43 | 419 | 75.2 | 108 | 4 | US-09-466-635-1 | Sequence 4, Appli |
| 44 | 419 | 75.2 | 214 | 3 | US-09-247-352-4 | Sequence 4, Appli |
| 45 | 419 | 75.2 | 214 | 4 | US-09-466-635-4 | Sequence 4, Appli |

ALIGNMENTS

RESULT 1
US-08-192-102-3
; Sequence 3, Application US/08192102
; Patent No. 5656272
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND ASSAYS EMPLOYING
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08192,102
; FILING DATE: 04-FEB-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08192,093
; FILING DATE: 04-FEB-1994
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,606
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592

REFERENCE/DOCKET NUMBER: NYU93-01M3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
TELEFAX: (617) 861-9540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-192-102-3

Query Match 100.0%; Score 557; DB 1; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSFSCRSQFVGSIIHWYQORTNGSPRLIIKYASEMSGIPS 60
DB 1 DILLTQSPAILSVSPGERVSFSCRSQFVGSIIHWYQORTNGSPRLIIKYASEMSGIPS 60

QY 61 RFGSGSGTDTLSINTVESEDIADYYCQQSHSWPFTFGSGTNLEVK 107
DB 61 RFGSGSGTDTLSINTVESEDIADYYCQQSHSWPFTFGSGTNLEVK 107

RESULT 2
US-08-324-799-3
Sequence 3, Application US/08324799
Patent No. 5698195
GENERAL INFORMATION:
APPLICANT: Le, Junming
APPLICANT: Vilcek, Jan
APPLICANT: Daddona, Peter E.
APPLICANT: Ghayeb, John
APPLICANT: Knight, David M.
APPLICANT: Siegel, Scott A.
TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND PEPTIDES
TITLE OF INVENTION: OF HUMAN TUMOR NECROSIS FACTOR
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: Massachusetts
COUNTRY: USA
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/324,799
FILING DATE: 18-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/192,093
FILING DATE: 04-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/192,102
FILING DATE: 04-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/192,861
FILING DATE: 04-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/013,413
FILING DATE: 02-FEB-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/010,406
FILING DATE: 29-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/943,852
FILING DATE: 11-SEP-1992
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/853,606
FILING DATE: 18-MAR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/670,827
FILING DATE: 18-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Brook, David E.
REGISTRATION NUMBER: 22,592
REFERENCE/DOCKET NUMBER: NYU93-01M4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
TELEFAX: (617) 861-9540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-324-799-3

Query Match 100.0%; Score 557; DB 1; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSFSCRSQFVGSIIHWYQORTNGSPRLIIKYASEMSGIPS 60
DB 1 DILLTQSPAILSVSPGERVSFSCRSQFVGSIIHWYQORTNGSPRLIIKYASEMSGIPS 60

QY 61 RFGSGSGTDTLSINTVESEDIADYYCQQSHSWPFTFGSGTNLEVK 107
DB 61 RFGSGSGTDTLSINTVESEDIADYYCQQSHSWPFTFGSGTNLEVK 107

RESULT 3
US-08-192-861A-3
Sequence 3, Application US/08192861A
Patent No. 5919452
GENERAL INFORMATION:
APPLICANT: Le, Junming
APPLICANT: Vilcek, Jan
APPLICANT: Daddona, Peter E.
APPLICANT: Ghayeb, John
APPLICANT: Knight, David M.
APPLICANT: Siegel, Scott A.
TITLE OF INVENTION: METHODS OF TREATING TNF-MEDIATED DISEASE USING
TITLE OF INVENTION: CHIMERIC ANTI-TNF ANTIBODIES (As Amended)
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: Massachusetts
COUNTRY: USA
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/192,861A
FILING DATE: 04-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/013,413
FILING DATE: 02-FEB-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/010,406
FILING DATE: 29-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/943,852
FILING DATE: 11-SEP-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/853,606

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; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781) 861-6240
; TELEFAX: (781) 861-9540
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 107 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-192-861A-3
Query Match 100.0%; Score 557; DB 2; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 DILLTQSPAILSVSGERVSFSCRASQFVGSSIHVYQORTNGSPRLIKYASEMSGIPS 60
QY 61 RFGSGSGTDTLTSINTVESEDIADYICQQSHSWPFTFGSGTNLEVK 107
DB 61 RFGSGSGTDTLTSINTVESEDIADYICQQSHSWPFTFGSGTNLEVK 107

RESULT 4
US-09-133-119-3
; Sequence 3, Application US/09133119
; Patent No. 6277969
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND PEPTIDES
; TITLE OF INVENTION: OF HUMAN TUMOR NECROSIS FACTOR
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/133,119
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/570,674
; FILING DATE: 11-DEC-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/324,799
; FILING DATE: 18-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,093
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,102
; FILING DATE: 04-FEB-1994

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,861
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,606
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M4A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 107 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-09-133-119-3
Query Match 100.0%; Score 557; DB 3; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 DILLTQSPAILSVSGERVSFSCRASQFVGSSIHVYQORTNGSPRLIKYASEMSGIPS 60
QY 61 RFGSGSGTDTLTSINTVESEDIADYICQQSHSWPFTFGSGTNLEVK 107
DB 61 RFGSGSGTDTLTSINTVESEDIADYICQQSHSWPFTFGSGTNLEVK 107

RESULT 5
US-08-192-093A-3
; Sequence 3, Application US/08192093A
; Patent No. 6284471
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND ASSAYS EMPLOYING
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:

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/ APPLICATION NUMBER: US/08/192.093A
/ FILING DATE: 04-FEB-1994
/ PRIOR APPLICATION NUMBER: US 08/013,413
/ APPLICATION NUMBER: US 08/013,413
/ FILING DATE: 02-FEB-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/010,406
/ FILING DATE: 29-JAN-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/943,852
/ FILING DATE: 11-SEP-1992
/ APPLICATION DATA:
/ APPLICATION NUMBER: US 07/853,606
/ FILING DATE: 18-MAR-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/670,827
/ FILING DATE: 18-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Brook, David E.
/ REGISTRATION NUMBER: 22,592
/ REFERENCE/DOCKET NUMBER: NYU93-01M3
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 861-6240
/ TELEFAX: (617) 861-9540
/ INFORMATION FOR SEQ ID NO: 3:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 107 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-192-093A-3

Query Match 100.0%; Score 557; DB 3; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSFSCRASQFVGSIIHWYQQTNGSPRLLIKVASMSGIPS 60
Db 1 DILLTQSPAILSVSPGERVSFSCRASQFVGSIIHWYQQTNGSPRLLIKVASMSGIPS 60

QY 61 RFSGSGSGTDTLTSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFSGSGSGTDTLTSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107

RESULT 6
US-09-756-301B-3
/ Sequence 3, Application US/09/756301B
/ Patent No. 6790444
/ GENERAL INFORMATION:
/ APPLICANT: Le, Junning
/ APPLICANT: Vilcek, Jan
/ APPLICANT: Daddona, Peter
/ APPLICANT: Grayeb, John
/ APPLICANT: Knight, David M.
/ APPLICANT: Siegel, Scott
/ TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
/ TITLE OF INVENTION: Human Tumor Necrosis Factor
/ FILE REFERENCE: 0975.1005-008
/ CURRENT APPLICATION NUMBER: US/09/756,301B
/ CURRENT FILING DATE: 2001-01-08
/ PRIOR APPLICATION NUMBER: U.S. 09/133,119
/ PRIOR FILING DATE: 1998-08-12
/ PRIOR APPLICATION NUMBER: U.S. 08/570,674
/ PRIOR FILING DATE: 1995-12-11
/ PRIOR APPLICATION NUMBER: U.S. 08/324,799
/ PRIOR FILING DATE: 1994-10-18
/ PRIOR APPLICATION NUMBER: U.S. 08/192,102
/ PRIOR FILING DATE: 1994-02-04
/ PRIOR APPLICATION NUMBER: U.S. 08/192,861
/ PRIOR FILING DATE: 1994-02-04
/ PRIOR APPLICATION NUMBER: U.S. 08/192,093
/ PRIOR FILING DATE: 1994-02-04
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/ PRIOR APPLICATION NUMBER: U.S. 08/010,406
/ PRIOR FILING DATE: 1993-01-29
/ PRIOR APPLICATION NUMBER: U.S. 08/013,413
/ PRIOR FILING DATE: 1993-02-02
/ PRIOR APPLICATION NUMBER: U.S. 07/943,852
/ PRIOR FILING DATE: 1992-09-11
/ PRIOR APPLICATION NUMBER: U.S. 07/853,606
/ PRIOR FILING DATE: 1992-03-18
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 30
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 3
/ LENGTH: 107
/ TYPE: PRT
/ ORGANISM: Mus Balb/c
US-09-756-301B-3

Query Match 100.0%; Score 557; DB 4; Length 107;
Best Local Similarity 100.0%; Pred. No. 6.2e-46;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSFSCRASQFVGSIIHWYQQTNGSPRLLIKVASMSGIPS 60
Db 1 DILLTQSPAILSVSPGERVSFSCRASQFVGSIIHWYQQTNGSPRLLIKVASMSGIPS 60

QY 61 RFSGSGSGTDTLTSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFSGSGSGTDTLTSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107

RESULT 7
US-08-232-081B-40
/ Sequence 40, Application US/08232081B
/ Patent No. 5886152
/ GENERAL INFORMATION:
/ APPLICANT: NAKATANI, TOMOYUKI
/ APPLICANT: GOMI, HIDEYUKI
/ APPLICANT: WIJENES, JOHN
/ APPLICANT: NOGUCHI, HIROSHI
/ TITLE OF INVENTION: HUMANIZED B-B10
/ NUMBER OF SEQUENCES: 42
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: BIRCH, STEWART, KOLASCH AND BIRCH
/ STREET: PO BOX 747
/ CITY: FALLS CHURCH
/ STATE: VA
/ COUNTRY: USA
/ ZIP: 22040-0747
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/232,081B
/ FILING DATE:
/ CLASSIFICATION: 424
/ ATTORNEY/AGENT INFORMATION:
/ NAME: SVENSSON, LEONARD R.
/ REGISTRATION NUMBER: 30,330
/ REFERENCE/DOCKET NUMBER: 20-3484
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (703) 205-8000
/ TELEFAX: (703) 205-8050
/ INFORMATION FOR SEQ ID NO: 40:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 107 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-232-081B-40

Query Match 90.8%; Score 506; DB 2; Length 107;
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Best Local Similarity 89.7%; Pred. No. 4.4e-41;
Matches 96; Conservative 7; Mismatches 4; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 60
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 60
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

QY 61 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 107
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 61 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 107
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 8
US-09-244-369B-1
; Sequence 1, Application US/09244369B
; Patent No. 6418338
; GENERAL INFORMATION:
; APPLICANT: Barbera-Guillem, Emilio
; TITLE OF INVENTION: Method for detecting and surgically removing lymphoid tissue inv
; TITLE OF INVENTION: tumor progression
; FILE REFERENCE: Phy-01
; CURRENT APPLICATION NUMBER: US/09/244,369B
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: US 60/073,882
; PRIOR FILING DATE: 1998-02-06
; PRIOR APPLICATION NUMBER: US 60/077,970
; PRIOR FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 244
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-244-369B-1

Query Match 90.1%; Score 502; DB 4; Length 244;
Best Local Similarity 88.8%; Pred. No. 2.6e-40;
Matches 95; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 60
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 135 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 194
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

QY 61 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 107
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 195 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 241
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 9
US-09-940-391-1
; Sequence 1, Application US/09940391
; Patent No. 6760612
; GENERAL INFORMATION:
; APPLICANT: Barbera-Guillem, Emilio
; TITLE OF INVENTION: Method for detecting lymphoid tissue involved in tumor progressio
; FILE REFERENCE: Phy-03
; CURRENT APPLICATION NUMBER: US/09/940,391
; CURRENT FILING DATE: 2001-08-27
; PRIOR APPLICATION NUMBER: 09/244,369
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/077,970
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/073,882
; PRIOR FILING DATE: 1998-02-06
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 244
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-940-391-1

Query Match 90.1%; Score 502; DB 4; Length 244;

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Best Local Similarity 88.8%; Pred. No. 2.6e-40;
Matches 95; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 60
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 135 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 194
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

QY 61 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 107
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 195 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 241
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 10
US-07-956-399-4
; Sequence 4, Application US/07956399
; Patent No. 5876717
; GENERAL INFORMATION:
; APPLICANT: SHIMAMURA, TOSHIRO
; APPLICANT: TAKI, SHINSUKE
; APPLICANT: HAMURO, JUNII
; TITLE OF INVENTION: POLYPEPTIDES CAPABLE OF BINDING TO HEAVY
; TITLE OF INVENTION: CHAINS OF IL-2 RECEPTORS
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/956,399
; FILING DATE: 19921005
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Oblon, No. 5876717man F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 10-586-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 239 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-956-399-4

Query Match 89.8%; Score 500; DB 2; Length 239;
Best Local Similarity 88.8%; Pred. No. 3.9e-40;
Matches 95; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 60
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 2 DIQLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQOQTNGSPRLIIKYASEMSGIPS 61
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

QY 61 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 107
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 62 RFGSGSGTDFTLTSLNTVESEDIADYYCQSHSWPFTFGSGTINLEVK 108
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 11
US-07-956-399-2
; Sequence 2, Application US/07956399
; Patent No. 5876717

```

GENERAL INFORMATION:
APPLICANT: SHIMAMURA, TOSHIRO
APPLICANT: TAKI, SHINSUKE
APPLICANT: HAMURO, JUNJI
TITLE OF INVENTION: POLYPEPTIDES CAPABLE OF BINDING TO HEAVY
TITLE OF INVENTION: CHAINS OF IL-2 RECEPTORS
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
ADDRESSEE: P.C. Jefferson Davis Highway, Suite 400
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/956,399
FILING DATE: 1992/10/05
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5876717man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 10-586-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 240 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-956-399-2

Query Match 89.4%; Score 498; DB 2; Length 240;
Best Local Similarity 87.9%; Pred. No. 6.1e-40;
Matches 94; Conservative 8; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILITQSPAILSVSPGERVSPFCRSQVGVSSIHVYQORTNGSPRLIKYASSSMSGIPS 60
Db 2 DILITQSPAILSVSPGERVSPFCRSQVGVSSIHVYQORTNGSPRLIKYASSSMSGIPS 61
QY 61 RFGSGSGTDTLTINTVSESDIADYYCQOSHSPFTFGSGTNLEVK 107
Db 62 RFGSGSGTDTLTINTVSESDIADYYCQOSHSPFTFGSGTNLEVK 108

RESULT 12
US-08-326-362-4
Sequence 4, Application US/08326362
Patent No. 5730981
GENERAL INFORMATION:
APPLICANT: Bosslet, Klaus
APPLICANT: Seeman, Gerhard
APPLICANT: Dippold, Wolfgang
TITLE OF INVENTION: Monoclonal Anti-Gargliocide Antibody,
TITLE OF INVENTION: Its Preparation and Use as a Tumortherapeutic Agent
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W., Suite 700
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:

GENERAL INFORMATION:
APPLICANT: SHIMAMURA, TOSHIRO
APPLICANT: TAKI, SHINSUKE
APPLICANT: HAMURO, JUNJI
TITLE OF INVENTION: POLYPEPTIDES CAPABLE OF BINDING TO HEAVY
TITLE OF INVENTION: CHAINS OF IL-2 RECEPTORS
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
ADDRESSEE: P.C. Jefferson Davis Highway, Suite 400
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/326,362
FILING DATE: 1992/03/26
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/032,863
FILING DATE: 17-MAR-1993
APPLICATION NUMBER: DE P 42 08 795.3
FILING DATE: 19-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Einaudi, Carol P.
REGISTRATION NUMBER: 32,220
REFERENCE/DOCKET NUMBER: 02481-1276-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 106 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-326-362-4

Query Match 89.0%; Score 496; DB 1; Length 106;
Best Local Similarity 87.7%; Pred. No. 3.9e-40;
Matches 93; Conservative 9; Mismatches 4; Indels 0; Gaps 0;

QY 1 DILITQSPAILSVSPGERVSPFCRSQVGVSSIHVYQORTNGSPRLIKYASSSMSGIPS 60
Db 1 DILITQSPAILSVSPGERVSPFCRSQVGVSSIHVYQORTNGSPRLIKYASSSMSGIPS 60
QY 61 RFGSGSGTDTLTINTVSESDIADYYCQOSHSPFTFGSGTNLEVK 106
Db 61 RFGSGSGTDTLTINTVSESDIADYYCQOSHSPFTFGSGTNLEVK 106

RESULT 13
US-08-476-176B-4
Sequence 4, Application US/08476176B
Patent No. 5958708
GENERAL INFORMATION:
APPLICANT: Hardman, No. 5958708man
APPLICANT: Kolbinger, Frank
APPLICANT: Saldanha, Jose
TITLE OF INVENTION: Reshaped monoclonal antibodies against an
TITLE OF INVENTION: immunoglobulin isotype
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5958708artis Patent Department
STREET: 59 Route 10
CITY: East Hanover
STATE: New Jersey
COUNTRY: USA
ZIP: 07936-1080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/476,176B
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/127,721
FILING DATE: 27-SEPTEMBER-1993
APPLICATION NUMBER: US 07/952,802
FILING DATE: 25-SEPTEMBER-1992


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ATTORNEY/AGENT INFORMATION:
NAME: No. 5958708ak, Henry P.
REGISTRATION NUMBER: 33,200
REFERENCE/DOCKET NUMBER: 4-19276/A/P2/CIP
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-476-176B-4

Query Match      88.7%; Score 494; DB 2; Length 107;
Best Local Similarity 86.9%; Pred. No. 6e-40;
Matches 93; Conservative 9; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60

QY 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107

RESULT 14
US-08-127-721A-4
Sequence 4, Application US/08127721A
Patent No. 6066718
GENERAL INFORMATION:
APPLICANT: Hardman, No. 6066718man
APPLICANT: Kolbinger, Frank
APPLICANT: Saldanha, Jose
TITLE OF INVENTION: Reshaped monoclonal antibodies against an
TITLE OF INVENTION: immunoglobulin isotype
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSER: No. 6066718artis Patent and Trademark Department
STREET: 59 Route 10
CITY: East Hanover
STATE: New Jersey
COUNTRY: USA
ZIP: 07936-1080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08127721A
FILING DATE: 27-SEPTEMBER-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 4-19276/A/P2/CIP
FILING DATE: 25-SEPTEMBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: No. 6066718ak, Henry P.
REGISTRATION NUMBER: 33,200
REFERENCE/DOCKET NUMBER: 4-19276/A/P2/CIP
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-127-721A-4

Query Match      88.7%; Score 494; DB 2; Length 107;
Best Local Similarity 86.9%; Pred. No. 6e-40;
Matches 93; Conservative 9; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60

QY 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107

RESULT 15
US-08-485-246A-4
Sequence 4, Application US/08485246A
Patent No. 6072035
GENERAL INFORMATION:
APPLICANT: Hardman, No. 6072035man
APPLICANT: Kolbinger, Frank
APPLICANT: Saldanha, Jose
TITLE OF INVENTION: Reshaped monoclonal antibodies against an
TITLE OF INVENTION: immunoglobulin isotype
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSER: No. 6072035artis Patent Department
STREET: 59 Route 10
CITY: East Hanover
STATE: New Jersey
COUNTRY: USA
ZIP: 07936-1080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08485246A
FILING DATE: 25-SEPTEMBER-1992
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/127,721
FILING DATE: 27-SEPTEMBER-1993
APPLICATION NUMBER: US 07/952,802
FILING DATE: 25-SEPTEMBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: No. 6072035ak, Henry P.
REGISTRATION NUMBER: 33,200
REFERENCE/DOCKET NUMBER: 4-19276/A/P2/CIP
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-485-246A-4

Query Match      88.7%; Score 494; DB 3; Length 107;
Best Local Similarity 86.9%; Pred. No. 6e-40;
Matches 93; Conservative 9; Mismatches 5; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSCRSASFVGSIIHWYQORTNGSPRLLIKYASESMGIPS 60

QY 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDFTLNINVSVESEDIAHYCCQSHSWPFTFGSGTNLEVK 107
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Job time : 28.4602 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 15, 2004, 17:21:06 ; Search time 91.3761 Seconds
(without alignments)
418.250 Million cell updates/sec

Title: US-09-897-724-3

Perfect score: 557
Sequence: 1 DILLTQSPAILSVSPGERVS.....CQSHSWPTFGSGTNLEVK 107

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
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- 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
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- 10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/2/pubpaa/US10D_PUBCOMB.pep.*
- 17: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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| 2 | 557 | 100.0 | 107 | 9 | US-09-927-703-3 |
| 3 | 557 | 100.0 | 107 | 9 | US-09-766-535A-3 |
| 4 | 557 | 100.0 | 107 | 9 | US-09-756-161A-3 |
| 5 | 557 | 100.0 | 107 | 10 | US-09-756-398B-3 |
| 6 | 557 | 100.0 | 107 | 10 | US-09-897-724-3 |
| 7 | 557 | 100.0 | 107 | 13 | US-10-010-229-3 |
| 8 | 557 | 100.0 | 107 | 13 | US-10-043-450-3 |
| 9 | 557 | 100.0 | 107 | 13 | US-10-044-534-3 |
| 10 | 557 | 100.0 | 107 | 14 | US-10-043-432-3 |
| 11 | 557 | 100.0 | 107 | 14 | US-10-208-145-3 |
| 12 | 557 | 100.0 | 107 | 14 | US-10-198-845-3 |
| 13 | 557 | 100.0 | 107 | 14 | US-10-227-488-3 |

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| 14 | 557 | 100.0 | 107 | 14 | US-10-197-121-3 | Sequence 3, Appli |
| 15 | 557 | 100.0 | 107 | 14 | US-10-176-460-3 | Sequence 3, Appli |
| 16 | 557 | 100.0 | 107 | 14 | US-10-186-559-3 | Sequence 3, Appli |
| 17 | 557 | 100.0 | 107 | 14 | US-10-371-961-3 | Sequence 3, Appli |
| 18 | 557 | 100.0 | 107 | 14 | US-10-300-795-3 | Sequence 3, Appli |
| 19 | 557 | 100.0 | 107 | 14 | US-10-319-011-3 | Sequence 3, Appli |
| 20 | 557 | 100.0 | 107 | 14 | US-10-371-443-3 | Sequence 3, Appli |
| 21 | 557 | 100.0 | 107 | 14 | US-10-379-866-3 | Sequence 3, Appli |
| 22 | 557 | 100.0 | 107 | 14 | US-10-371-962-3 | Sequence 3, Appli |
| 23 | 557 | 100.0 | 107 | 14 | US-10-384-060-31 | Sequence 31, Appli |
| 24 | 557 | 100.0 | 107 | 16 | US-10-665-971-3 | Sequence 3, Appli |
| 25 | 557 | 100.0 | 107 | 16 | US-10-637-759-3 | Sequence 3, Appli |
| 26 | 557 | 100.0 | 107 | 16 | US-10-774-118-3 | Sequence 3, Appli |
| 27 | 557 | 100.0 | 226 | 15 | US-10-411-037-42 | Sequence 42, Appli |
| 28 | 557 | 100.0 | 226 | 15 | US-10-411-026-42 | Sequence 42, Appli |
| 29 | 557 | 100.0 | 226 | 15 | US-10-410-962-42 | Sequence 42, Appli |
| 30 | 557 | 100.0 | 226 | 15 | US-10-411-049-42 | Sequence 42, Appli |
| 31 | 557 | 100.0 | 226 | 16 | US-10-410-930-42 | Sequence 42, Appli |
| 32 | 557 | 100.0 | 226 | 16 | US-10-410-997-42 | Sequence 42, Appli |
| 33 | 557 | 100.0 | 226 | 16 | US-10-411-012-42 | Sequence 42, Appli |
| 34 | 557 | 100.0 | 226 | 16 | US-10-287-994-42 | Sequence 42, Appli |
| 35 | 557 | 100.0 | 226 | 16 | US-10-410-913-42 | Sequence 42, Appli |
| 36 | 557 | 100.0 | 240 | 14 | US-10-384-060-27 | Sequence 27, Appli |
| 37 | 502 | 90.1 | 107 | 15 | US-10-239-656-28 | Sequence 28, Appli |
| 38 | 502 | 90.1 | 107 | 15 | US-10-239-656-38 | Sequence 38, Appli |
| 39 | 502 | 90.1 | 108 | 14 | US-10-412-703A-129 | Sequence 129, App |
| 40 | 502 | 90.1 | 242 | 14 | US-10-336-210-9 | Sequence 9, Appli |
| 41 | 502 | 90.1 | 244 | 9 | US-09-940-391-1 | Sequence 1, Appli |
| 42 | 502 | 90.1 | 244 | 14 | US-10-336-210-8 | Sequence 8, Appli |
| 43 | 502 | 90.1 | 510 | 15 | US-10-239-656-48 | Sequence 48, Appli |
| 44 | 502 | 90.1 | 510 | 15 | US-10-239-656-49 | Sequence 49, Appli |
| 45 | 497 | 89.2 | 107 | 14 | US-10-308-817-129 | Sequence 129, App |

ALIGNMENTS

RESULT 1

US-09-756-301A-3
; Sequence 3, Application US/09756301A
; Patent No. US20010027249A1
; GENERAL INFORMATION:
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-008
; CURRENT APPLICATION NUMBER: US/09/756.301A
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18

; PRIOR APPLICATION NUMBER: U.S.07/670,827
 ; PRIOR FILING DATE: 1991-03-18
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 107
 ; TYPE: PRT
 ; ORGANISM: Mus Balb/c
 US-09-756-301A-3

Query Match 100.0%; Score 557; DB 9; Length 107;
 Best Local Similarity 100.0%; Pred. No. 9.2e-45;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Qy 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 2
 US-09-927-703-3
 ; Sequence 3, Application US/09927703
 ; Patent No. US2002022720A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Vilcek, Jan
 ; APPLICANT: Daddona, Peter
 ; APPLICANT: Chrayeb, John
 ; APPLICANT: Knight, David M.
 ; APPLICANT: Siegel, Scott
 ; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
 ; FILE REFERENCE: 0975.1005-013
 ; CURRENT APPLICATION NUMBER: US/09/927,703
 ; CURRENT FILING DATE: 2001-08-10
 ; PRIOR FILING DATE: 2001-01-08
 ; PRIOR APPLICATION NUMBER: U.S. 09/756,398
 ; PRIOR FILING DATE: 1998-08-12
 ; PRIOR APPLICATION NUMBER: U.S. 08/570,674
 ; PRIOR FILING DATE: 1995-12-11
 ; PRIOR APPLICATION NUMBER: U.S. 08/324,799
 ; PRIOR FILING DATE: 1994-10-18
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,102
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,861
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,093
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/010,406
 ; PRIOR FILING DATE: 1993-01-29
 ; PRIOR APPLICATION NUMBER: U.S. 08/013,413
 ; PRIOR FILING DATE: 1993-02-02
 ; PRIOR APPLICATION NUMBER: U.S. 07/943,852
 ; PRIOR FILING DATE: 1992-09-11
 ; PRIOR APPLICATION NUMBER: U.S. 07/853,606
 ; PRIOR FILING DATE: 1992-03-18
 ; PRIOR APPLICATION NUMBER: U.S. 07/670,827
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 107
 ; TYPE: PRT
 ; ORGANISM: Mus Balb/c
 US-09-927-703-3

Query Match 100.0%; Score 557; DB 9; Length 107;
 Best Local Similarity 100.0%; Pred. No. 9.2e-45;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Qy 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107

Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Qy 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 3
 US-09-766-535A-3
 ; Sequence 3, Application US/09766535A
 ; Patent No. US20020106372A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Vilcek, Jan
 ; APPLICANT: Daddona, Peter
 ; APPLICANT: Chrayeb, John
 ; APPLICANT: Knight, David M.
 ; APPLICANT: Siegel, Scott
 ; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
 ; FILE REFERENCE: 0975.1005-010
 ; CURRENT APPLICATION NUMBER: US/09/766,535A
 ; CURRENT FILING DATE: 2001-01-18
 ; PRIOR FILING DATE: 1998-08-12
 ; PRIOR APPLICATION NUMBER: U.S. 08/570,674
 ; PRIOR FILING DATE: 1995-12-11
 ; PRIOR APPLICATION NUMBER: U.S. 08/324,799
 ; PRIOR FILING DATE: 1994-10-18
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,102
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,861
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/192,093
 ; PRIOR FILING DATE: 1994-02-04
 ; PRIOR APPLICATION NUMBER: U.S. 08/010,406
 ; PRIOR FILING DATE: 1993-01-29
 ; PRIOR APPLICATION NUMBER: U.S. 08/013,413
 ; PRIOR FILING DATE: 1993-02-02
 ; PRIOR APPLICATION NUMBER: U.S. 07/943,852
 ; PRIOR FILING DATE: 1992-09-11
 ; PRIOR APPLICATION NUMBER: U.S. 07/853,606
 ; PRIOR FILING DATE: 1992-03-18
 ; PRIOR APPLICATION NUMBER: U.S. 07/670,827
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 107
 ; TYPE: PRT
 ; ORGANISM: Mus Balb/c
 US-09-766-535A-3

Query Match 100.0%; Score 557; DB 9; Length 107;
 Best Local Similarity 100.0%; Pred. No. 9.2e-45;
 Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIKYASESMGIPS 60
 Qy 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107
 Db 61 RFGSGSGTDFTLINTVSESDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 4
 US-09-756-161A-3
 ; Sequence 3, Application US/09756161A

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; Patent No. US20020132307A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-007
; CURRENT APPLICATION NUMBER: US/09/756,161A
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-756-398B-3

Query Match      100.0%; Score 557; DB 9; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIIKYASESMGIPS 60
    |||||
DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIIKYASESMGIPS 60
    |||||

QY 61 RFGSGSGTDFTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
    |||||
DB 61 RFGSGSGTDFTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
    |||||

RESULT 5
US-09-756-398B-3
; Sequence 3, Application US/09756398B
; Publication No. US20030017584A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-006
; CURRENT APPLICATION NUMBER: US/09/756,398B
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119

Query Match      100.0%; Score 557; DB 9; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSSIHVYQORTNGSPRLIIKYASESMGIPS 60
    |||||

QY 61 RFGSGSGTDFTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
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DB 61 RFGSGSGTDFTLTSLINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
    |||||

RESULT 6
US-09-897-724-3
; Sequence 3, Application US/09897724
; Publication No. US20030175837A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-012
; CURRENT APPLICATION NUMBER: US/09/897,724
; CURRENT FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
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; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-897-724-3

Query Match      100.0%; Score 557; DB 10; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60

Qy 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 7
US-10-010-229-3
; Sequence 3, Application US/10010229
; Publication No. US20020114805A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/010,229
; PRIOR FILING DATE: 2001-12-07
; PRIOR APPLICATION NUMBER: US/09/927,703
; PRIOR FILING DATE: 2001-08-10
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-010-229-3

Query Match      100.0%; Score 557; DB 13; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60

Qy 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 8
US-10-043-450-3
; Sequence 3, Application US/10043450
; Publication No. US20020141996A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/043,450
; CURRENT FILING DATE: 2002-01-10

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; PRIOR APPLICATION NUMBER: 09/927,703
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-043-450-3

Query Match      100.0%; Score 557; DB 13; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSPFCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60

Qy 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLTSINTVESEDIADYYCQOSHWPFTFGSGTNLEVK 107

RESULT 9
US-10-044-534-3
; Sequence 3, Application US/10044534
; Publication No. US20020146419A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/044,534
; CURRENT FILING DATE: 2002-01-10
; PRIOR APPLICATION NUMBER: 09/927,703
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18

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; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-044-534-3

Query Match      100.0%; Score 557; DB 13; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60
DB 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60

QY 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
DB 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

RESULT 10
US-10-043-432-3
; Sequence 3, Application US/10043432
; Publication No. US20030054004A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/043,432
; PRIOR FILING DATE: 2002-01-10
; PRIOR APPLICATION NUMBER: 09/927,703
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-044-534-3

Query Match      100.0%; Score 557; DB 13; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60
DB 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60

QY 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
DB 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107

RESULT 11
US-10-208-145-3
; Sequence 3, Application US/10208145
; Publication No. US20030133935A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-006
; CURRENT APPLICATION NUMBER: US/10/208,145
; CURRENT FILING DATE: 2002-07-29
; PRIOR APPLICATION NUMBER: US/09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-208-145-3

Query Match      100.0%; Score 557; DB 14; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60
DB 1 DILLTQSPALLSVSPGERVSPFCRASQFVGSSIHVQORTNGSPRLLIKVASMSGIPS 60

QY 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
DB 61 RFSGSGSGTDTLTSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
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; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-187-121-3

Query Match 100.0%; Score 557; DB 14; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSVFSCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSVFSCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPS 60

Qy 61 RFGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-176-460-3

Query Match 100.0%; Score 557; DB 14; Length 107;
Best Local Similarity 100.0%; Pred. No. 9.2e-45;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVSVFSCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPS 60
Db 1 DILLTQSPAILSVSPGERVSVFSCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPS 60

Qy 61 RFGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTDTLSINTVESEDIADYCCQSHSWPFTFGSGTNLEVK 107

Search completed: December 15, 2004, 17:37:56
Job time : 93.3761 secs
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RESULT 15
US-10-176-460-3
; Sequence 3, Application US/10176460
; Publication No. US20030176676A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junning
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-006
; CURRENT APPLICATION NUMBER: US/10176,460
; CURRENT FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: US/09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
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Query Match      89.2%; Score 497; DB 2; Length 128;
Best Local Similarity 86.9%; Pred. No. 3.3e-37;
Matches 93; Conservative
QY 1 DILLTQSPAILSVSPGERVVSFSCRAQFQVSSIHVYQORTNGSPRLLIKYASESMGIPS 60
Db 11 DVLITQSPAILSVSPGERVVSFSCRAQFQVSSIHVYQORTNGPPRLLIKYASESISGIPS 70
QY 61 RFGSGSGGDTFLISINTVSEDIADYYCQSHSWPPTFGSGTNLEVK 107
Db 71 RFGSGSGGDTFLISINTVSEDIADYYCQSHSWPPTFGSGTKLEIK 117

RESULT 3
KWSL7
IG kappa chain precursor V region (L7) - mouse
C:Species: Mus musculus (house mouse)
C:Date: 18-Dec-1981 #sequence_revision 18-Dec-1981 #text_change 09-Jul-2004
C:Accession: A01925
R:Pech, M.; Hochtl, J.; Schnell, H.; Zachau, H.G.
Nature 291, 668-670, 1981
A:Title: Differences between germ-line and rearranged immunoglobulin V-kappa coding sequences
A:Reference number: A93259; MUID:81220975; PMID:6264318
A:Accession: A01925
A:Molecule type: DNA
A:Residues: 1-115 <PEC>
A:Cross-references: UNIPROT:P01642; GB:V01564; GB:J00574; NID:951718; PIDN:CAA24884.1; F:
A>Note: the sequence was determined from the germline gene
A>Note: there appear to be two possible splice junctions at the 3' end of the intron; th
C:Genetics:
A:Introns: 17/1
C:Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kappa)
chain disulfide bonds. In some cases, such as Iga and Igm, the subunits associate into la
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-115/Product: Ig kappa chain V region (L7) #status predicted <MAT>
F:36-110/Domain: immunoglobulin homology <IMM>
F:43-108/Disulfide bonds: #status predicted

Query Match      84.0%; Score 468; DB 1; Length 115;
Best Local Similarity 93.7%; Pred. No. 1.1e-34;
Matches 89; Conservative
QY 1 DILLTQSPAILSVSPGERVVSFSCRAQFQVSSIHVYQORTNGSPRLLIKYASESMGIPS 60
Db 21 DILLTQSPAILSVSPGERVVSFSCRAQFQVSSIHVYQORTNGSPRLLIKYASESISGIPS 80
QY 61 RFGSGSGGDTFLISINTVSEDIADYYCQSHSWP 95
Db 81 RFGSGSGGDTFLISINTVSEDIADYYCQSHSWP 115

RESULT 4
PL0267
IG kappa chain V region (anti-DNA, DP12VK) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 16-Sep-1992 #sequence_revision 16-Sep-1992 #text_change 21-Jan-2000
C:Accession: PL0267
R:Shlomchik, M.; Mascelli, M.; Shan, H.; Radic, M.Z.; Pisetsky, D.; Marshak-Rothstein, R.
J. Exp. Med. 171, 265-297, 1990
A:Title: Anti-DNA antibodies from autoimmune mice arise by clonal expansion and somatic
A:Reference number: PL0231; MUID:90111618; PMID:2104919
A:Accession: PL0267
A:Molecule type: mRNA
A:Residues: 1-106 <SHL>
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:1-23/Region: framework 1
F:16-90/Domain: immunoglobulin homology <IMM>
F:24-34/Region: complementarity-determining 1
F:35-49/Region: framework 2
F:50-56/Region: complementarity-determining 2

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Best Local Similarity 72.9%; Pred. No. 4e-31;
Matches 78; Conservative 17; Mismatches 12; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGRVSPFSCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 13 DIVLTQSPAILSVTPGDKVSLSCRASQSIISNHLHWYQOKSHSPRLIIKYASQISGIPS 72
QY 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107
Db 73 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 119

RESULT 7
A45722
anti-glycoprotein H monoclonal antibody light-chain variable domain (Mab 5) - mouse (fr
C:Species: Mus musculus (house mouse)
C>Date: 03-Mar-1994 #sequence_revision 18-Nov-1994 #text_change 21-Jan-2000
C/Accession: A45722
R:Simpson, J.A.; Chow, J.C.; Baker, J.; Avdalovic, N.; Yuan, S.; Au, D.; Co, M.S.; Vasqu
J. Virol. 67, 489-496, 1993
A:Title: Neutralizing monoclonal antibodies that distinguish three antigenic sites on hu
A:Reference number: A45722; MUID:93100833; PMID:7677958
A:Accession: A45722
A>Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-107 <SIM>
A>Note: sequence extracted from NCBI backbone (NCBIP:120589)
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: glycoprotein
F:16-90/Domain: immunoglobulin homology <IMM>

Query Match 76.1%; Score 424; DB 2; Length 107;
Best Local Similarity 72.0%; Pred. No. 7.9e-31;
Matches 77; Conservative 17; Mismatches 13; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGRVSPFSCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 1 DIVLTQSPAILSVTPGDKVSLSCRASQSIISNHLHWYQOKSHSPRLIIKYASQISGIPS 60
QY 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107
Db 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107

RESULT 8
B45722
anti-glycoprotein H monoclonal antibody light-chain variable domain (Mab 33) - mouse (fr
C:Species: Mus musculus (house mouse)
C>Date: 22-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 21-Jan-2000
C/Accession: B45722
R:Simpson, J.A.; Chow, J.C.; Baker, J.; Avdalovic, N.; Yuan, S.; Au, D.; Co, M.S.; Vasqu
J. Virol. 67, 489-496, 1993
A:Title: Neutralizing monoclonal antibodies that distinguish three antigenic sites on hu
A:Reference number: A45722; MUID:93100833; PMID:7677958
A:Accession: B45722
A>Status: preliminary; not compared with conceptual translation
A:Molecule type: nucleic acid
A:Residues: 1-107 <SIM>
A>Note: sequence extracted from NCBI backbone (NCBIP:120590)
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: glycoprotein
F:16-90/Domain: immunoglobulin homology <IMM>

Query Match 75.8%; Score 422; DB 2; Length 107;
Best Local Similarity 71.0%; Pred. No. 1.2e-30;
Matches 76; Conservative 19; Mismatches 12; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGRVSPFSCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 1 DIVLTQSPAILSVTPGDKVSLSCRASQSIISNHLHWYQOKSHSPRLIIKYASQISGIPS 60
QY 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107

Db 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107

RESULT 9
PH082
Ig light chain V region (clone 165.54) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 21-Jan-2000
C/Accession: PH1082
R:Tillman, D.M.; Jcu, N.T.; Hill, R.J.; Marion, T.N.
J. Exp. Med. 176, 761-779, 1992
A:Title: Both IgM and IgG anti-DNA antibodies are the products of clonally selective B c
A:Reference number: PH0971; MUID:92381444; PMID:1512540
A:Accession: PH1082
A:Molecule type: nucleic acid sequence not shown
A:Residues: 1-87 <TIL>
A:Experimental source: B cell, strain [NZB x NZW]F1
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: immunoglobulin
F:6-80/Domain: immunoglobulin homology <IMM>

Query Match 75.7%; Score 421.5; DB 2; Length 87;
Best Local Similarity 92.0%; Pred. No. 1.1e-30;
Matches 81; Conservative 5; Mismatches 1; Indels 1; Gaps 1;

QY 11 LSVSPGRVSPFSCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPSPFSGSGT 70
Db 1 LSVSPGRVSPFSCRASQSIISNHLHWYQORTNGSPRLIIKYASESITGIPSPFSGSGT 60
QY 71 FTLSINTVSEDIADYCCQSHSWPFTF 98
Db 61 FTLSINTVSEDIADYCCQSHSWP-TF 87

RESULT 10
A26471
Ig kappa chain precursor V region (MAK33) - mouse
C:Species: Mus musculus (house mouse)
C>Date: 05-Jun-1988 #sequence_revision 05-Jun-1988 #text_change 23-Jul-1999
C/Accession: A26471
R:Buckel, P.; Hubner-Parajsz, C.; Mattes, R.; Lenz, H.; Haug, H.; Beaucamp, K.
Gene 51, 13-19, 1987
A:Title: Cloning and nucleotide sequence of heavy- and light-chain cDNAs from a creatin
A:Reference number: A91572; MUID:87248058; PMID:3110009
A:Accession: A26471
A:Molecule type: mRNA
A:Residues: 1-138 <BUC>
A:Cross-references: GB:M16162; NID:g196893; PIDN:AAA38823.1; PID:g196894
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-138/Product: Ig kappa chain V region #status predicted <VAT>

Query Match 75.4%; Score 420; DB 2; Length 138;
Best Local Similarity 72.0%; Pred. No. 2.3e-30;
Matches 77; Conservative 18; Mismatches 12; Indels 0; Gaps 0;

QY 1 DILLTQSPAILSVSPGRVSPFSCRASQFVGSIIHWYQORTNGSPRLIIKYASESMGIPS 60
Db 21 DIVLTQSPAILSVTPRDSVSLSCRASQSIISNHLHWYQOKSHSPRLIIKYASQISGIPS 80
QY 61 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 107
Db 81 RFGSGSGTDFTLTINSVETEDFGMYFCQQTNSWPFTFGGTTKLEIK 127

RESULT 11
B43413
Ig kappa chain V region - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 27-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 21-Jan-2000
C/Accession: B43413

R;Tomiyama, Y.; Brojer, E.; Ruggeri, Z.M.; Shattil, S.J.; Smiltneck, J.; Gorski, J.; Kum J. Biol. Chem. 267, 18085-18092, 1992
A:Title: A molecular model of RGD ligands. Antibody D gene segments that direct specific
A:Reference number: A43413; MUID:92388177; PMID:1517241
A:Accession: B43413
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: nucleic acid
A:Residues: 1-104 <TM>
A:Note: sequence extracted from NCBI backbone (NCBI:112818)
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:13-87/Domain: immunoglobulin homology <IMM>

Query Match 74.1%; Score 413; DB 2; Length 104;
Best Local Similarity 72.1%; Pred. No. 7.2e-30;
Matches 75; Conservative 18; Mismatches 11; Indels 0; Gaps 0;

Qy 4 LTQSPAILSVSPGERSVFCRASQFVGSSTHWYQORTNGSPRLIKYASMSGIPSRFS 63
Db 1 LTQSPAILSVTPGDSVLSCRASQISNNLHWYQQSHSPRLIKYASQISGIPSRFS 60

Qy 64 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
Db 61 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 104

RESULT 12
S26346
Ig kappa chain V region - mouse
C:Species: Mus musculus (house mouse)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 20-Jun-2000
C:Accession: S26346
R;Stark, S.E.; Caton, A.J.
J. Exp. Med. 174, 613-624, 1991
A:Title: Antibodies that are specific for a single amino acid interchange in a protein e
A:Reference number: S26309; MUID:91341421; PMID:1908510
A:Accession: S26346
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-102 <STA>
A:Cross-references: EMBL:X59211; NID:G52338; PIDN:CAA41921.1; PID:gl334075
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:14-88/Domain: immunoglobulin homology <IMM>

Query Match 72.2%; Score 402; DB 2; Length 102;
Best Local Similarity 70.6%; Pred. No. 6.6e-29;
Matches 72; Conservative 18; Mismatches 12; Indels 0; Gaps 0;

Qy 3 LLTQSPAILSVSPGERSVFCRASQFVGSSTHWYQORTNGSPRLIKYASMSGIPSRF 62
Db 1 VLTQSPATLSVTPGDSVLSCRASQISNNLHWYQQSHSPRLIKYVQSISGIPSRF 60

Qy 63 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNL 104
Db 61 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNL 102

RESULT 13
S19975
Ig kappa chain V region (M-T408) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 06-Feb-1995 #sequence_revision 06-Feb-1995 #text_change 21-Jan-2000
C:Accession: S19975
R;Weissenhorn, W.; Riethmuller, G.; Weiss, E.M.; Rieber, E.P.
submitted to the EMBL Data Library, March 1992
A:Description: Structural characterization of CD4 mAb.
A:Reference number: S19963
A:Accession: S19975
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-103 <WEI>
A:Cross-references: EMBL:X65097; NID:G52296; PIDN:CAA46225.1; PID:G52297

C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:11-85/Domain: immunoglobulin homology <IMM>

Query Match 69.7%; Score 388; DB 2; Length 103;
Best Local Similarity 67.6%; Pred. No. 1.2e-27;
Matches 69; Conservative 17; Mismatches 16; Indels 0; Gaps 0;

Qy 6 QSPAILSVSPGERSVFCRASQFVGSSTHWYQORTNGSPRLIKYASMSGIPSRFS 65
Db 1 QSPATLSLSPGERATLSCRASQISDYLHWYQQSHSPRLIRFVSQISGIPSRFS 60

Qy 66 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
Db 61 GSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 102

RESULT 14
PL0106
Ig kappa chain precursor V-J-C region (LSI) - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 21-Jan-2000
C:Accession: PL0106
R;Silberstein, L.E.; Litwin, S.; Carmack, C.E.
J. Exp. Med. 169, 1631-1643, 1989
A:Title: Relationship of variable region genes expressed by a human B cell lymphoma sec
A:Reference number: PL0106; MUID:89235583; PMID:2541221
A:Accession: PL0106
A:Molecule type: mRNA
A:Residues: 1-144 <SL>
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-115/Domain: V region <VRE>
F:36-110/Domain: immunoglobulin homology <IMM>
F:44-54/Region: complementarity-determining 1
F:70-76/Region: complementarity-determining 2
F:109-115/Region: complementarity-determining 3
F:116-127/Domain: J region <JRG>
F:128-144/Domain: C region (fragment) <CRE>

Query Match 65.5%; Score 365; DB 2; Length 144;
Best Local Similarity 64.5%; Pred. No. 1.8e-25;
Matches 69; Conservative 15; Mismatches 23; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERSVFCRASQFVGSSTHWYQORTNGSPRLIKYASMSGIPS 60
Db 21 EIVLTQSPATLSLSPGERATLSCRASQSVSYLAWYQQRPQAPRLIYDASNEATGIPA 80

Qy 61 RPSGSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 107
Db 81 RPSGSGGTDFTLSINTVESEDIADYVCOQSHSWPFTFGSGTNLEVK 127

RESULT 15
S09963
Ig kappa chain V-J region (103-7E) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 09-Jul-2004
C:Accession: S09963
R;Reininger, L.; Shibata, T.; Ozaki, S.; Shirai, T.; Jatou, J.C.; Izui, S.
Eur. J. Immunol. 20, 771-777, 1990
A:Title: Variable region sequences of pathogenic anti-mouse red blood cell autoantibodie
A:Reference number: S09955; MUID:90269328; PMID:2347362
A:Accession: S09963
A:Molecule type: mRNA
A:Residues: 1-111 <REI>
A:Cross-references: UNIPROT:Q920E9; EMBL:X51851
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:16-94/Domain: immunoglobulin homology <IMM>

Query Match 65.4%; Score 364; DB 2; Length 111;

Best Local Similarity 65.5%; Pred. No. 1.7e-25;
Matches 74; Conservative 12; Mismatches 19; Indels 8; Gaps 3;
Qy 1 DILLTQSPAILSVSPGERSVFSCEASQFVCS-----IHWYQORTNGSPRLLIKAYASEMS 56
Db 1 DIVLTQSPASLAVSLGXRATLSCRASQSVSSGYSYHWHYQQKPGQSPKLLIKYASNLES 60
Qy 57 GIPSRFSGSGGTDFTLISINTVESEDIADYYCQSHSW--PFTFGSGTNLEVK 107
Db 61 GVPARFSGSGGTDFTLINIHVVEEDTATYYCQ--HSWEIPTYFGGKLEIK 111

Search completed: December 15, 2004, 17:21:47
Job time : 23.2522 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 15, 2004, 17:01:54 ; Search time 118.836 Seconds
(without alignments)
518.066 Million cell updates/sec

Title: US-09-897-724-3

Perfect score: 557
Sequence: 1 DILLTQSPAILSVSPGRVS.....CQSHSWPFTFGNTNLEVK 107.

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Uniprot 02:*

1: uniprot_sprot:*

2: uniprot_tramb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|--------------|--------------------|
| 1 | 468 | 84.0 | 115 | 1 KV51_MOUSE | P01642 mus musculu |
| 2 | 404 | 72.5 | 111 | 2 AAR10984 | Aar10984 mus muscu |
| 3 | 386.5 | 69.4 | 105 | 2 AAR11050 | Aar11050 mus muscu |
| 4 | 373 | 67.0 | 101 | 2 AAR10988 | Aar10988 mus muscu |
| 5 | 370 | 66.4 | 103 | 2 AAR11029 | Aar11029 mus muscu |
| 6 | 365 | 65.5 | 96 | 2 AAR11037 | Aar11037 mus muscu |
| 7 | 365 | 65.5 | 105 | 2 AAR11035 | Aar11035 mus muscu |
| 8 | 364.5 | 65.4 | 103 | 2 AAR11007 | Aar11007 mus muscu |
| 9 | 361 | 64.8 | 95 | 2 AAR11026 | Aar11026 mus muscu |
| 10 | 360 | 64.5 | 234 | 2 AAR10813 | Aar10813 homo sapi |
| 11 | 356.5 | 64.0 | 109 | 1 KV3P_HUMAN | P01624 homo sapien |
| 12 | 356 | 63.9 | 108 | 2 Q9UL83 | Q9UL83 homo sapien |
| 13 | 354.5 | 63.6 | 114 | 2 Q8K1F1 | Q8K1F1 mus musculu |
| 14 | 354 | 63.6 | 98 | 2 AAR11047 | Aar11047 mus muscu |
| 15 | 348.5 | 62.6 | 235 | 2 Q6GMW0 | Q6GMW0 homo sapien |
| 16 | 347.5 | 62.4 | 129 | 1 KV3H_HUMAN | P04207 homo sapien |
| 17 | 347 | 62.3 | 128 | 1 KV3K_HUMAN | P06311 homo sapien |
| 18 | 347 | 62.3 | 236 | 2 Q6GMX8 | Q6GMX8 homo sapien |
| 19 | 343 | 61.6 | 108 | 2 Q8VIJ0 | Q8VIJ0 mus musculu |
| 20 | 342.5 | 61.5 | 109 | 2 Q9UL85 | Q9UL85 homo sapien |
| 21 | 342 | 61.4 | 108 | 2 Q9UL79 | Q9UL79 homo sapien |
| 22 | 342 | 61.4 | 111 | 1 KV3H_MOUSE | P01660 mus musculu |
| 23 | 342 | 61.4 | 111 | 1 KV3M_MOUSE | P01665 mus musculu |
| 24 | 341 | 61.2 | 111 | 2 Q920E9 | Q920E9 mus musculu |
| 25 | 338 | 60.7 | 108 | 2 Q9UL77 | Q9UL77 homo sapien |
| 26 | 338 | 60.7 | 111 | 1 KV3L_MOUSE | P01664 mus musculu |
| 27 | 337 | 60.5 | 111 | 1 KV3C_MOUSE | P01667 mus musculu |
| 28 | 337 | 60.5 | 111 | 1 KV3S_MOUSE | P01671 mus musculu |
| 29 | 336.5 | 60.4 | 109 | 2 Q9UL78 | Q9UL78 homo sapien |
| 30 | 336.5 | 60.4 | 110 | 2 AAR10999 | Aar10999 mus muscu |
| 31 | 336 | 60.3 | 108 | 1 KV1M_HUMAN | P01605 homo sapien |

32 336 60.3 108 1 KV3V_MOUSE P01674 mus musculu
33 335.5 60.2 112 2 Q8K1F3 Q8K1F3 mus musculu
34 335 60.1 111 1 KV3R_MOUSE P01670 mus musculu
35 335 60.1 234 2 Q7Z473 Q7Z473 homo sapien
36 334 60.0 111 1 KV3U_MOUSE P01673 mus musculu
37 333 59.8 111 1 KV3Q_MOUSE P01669 mus musculu
38 332.5 59.7 109 1 KV3D_HUMAN P01622 homo sapien
39 332.5 59.7 129 1 KV3M_HUMAN P01622 homo sapien
40 332 59.6 104 2 AAR11020 Aar11020 mus muscu
41 332 59.6 234 2 Q91WF8 Q91WF8 mus musculu
42 331.5 59.5 129 1 KV3L_HUMAN P01635 homo sapien
43 331 59.4 111 1 KV3N_MOUSE P01665 mus musculu
44 331 59.4 236 2 Q8GMX0 Q8GMX0 homo sapien
45 330.5 59.3 107 2 Q96SA9 Q96SA9 homo sapien

ALIGNMENTS

RESULT 1
KV51_MOUSE
ID KV51_MOUSE STANDARD; PRT; 115 AA.
AC P01642;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 01-OCT-2004 (Rel. 45, Last annotation update)
DE Ig kappa chain V-V region L7 precursor (fragment) . .
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=81220975; PubMed=6264318;
RA Pech M., Hochl J., Schnell H., Zachau H.G.;
RT "Differences between germ-line and rearranged immunoglobulin V kappa
RT coding sequences suggest a localized mutation mechanism."
RL Nature 291:668-670(1981).
CC -!- MISCELLANEOUS: There appears to be two possible splice junctions
CC at the 3' end of the intron. The alternate would code for a
CC protein lacking residues 17-19.
DR PIR; A01925; KMSL7.
DR PDB; 1J10; X-ray; L=21-115.
DR PDB; 1J1P; X-ray; L=21-115.
DR PDB; 1J1X; X-ray; L=21-115.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003596; IG_V.
DR Pfam; PF00047; IG; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS50835; IG LIKE; 1.
KW 3D-structure; Immunoglobulin V region; Signal.
FT SIGNAL 1 20
FT CHAIN 21 >115
FT DOMAIN 21 43
FT DOMAIN 44 54
FT DOMAIN 55 69
FT DOMAIN 70 76
FT DOMAIN 77 108
FT DOMAIN 109 >115
FT DISULFID 43 108
FT STRAND 24 27
FT STRAND 30 33
FT TURN 35 36
FT STRAND 39 45
FT TURN 50 51
FT TURN 53 58
FT TURN 60 61
FT STRAND 65 69
FT TURN 70 72
FT STRAND 73 74
FT TURN 76 77
FT TURN 80 81
FT STRAND 82 87
Ig kappa chain V-V region L7.
Framework-1.
Complementarity-determining-1.
Framework-2.
Complementarity-determining-2.
Framework-3.
Complementarity-determining-3.
By similarity.

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FT TURN 88 89
FT STRAND 90 95
FT HELIX 100 102
FT STRAND 104 110
FT NON_TER 115 115
SQ SEQUENCE 115 AA; 12615 MW; C17BEC758C577E00 CRC64;

Query Match 84.0%; Score 468; DB 1; Length 115;
Best Local Similarity 93.7%; Pred. No. 2e-40;
Matches 89; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGERVFSFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPSRF 60
Dy 21 DILLTQSPAILSVSPGERVFSFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPSRF 80
Qy 61 RFGSGSGDTFTLSINTVESEDIADYYCQSHSWP 95
Dy 81 RFGSGSGDTFTLSINTVESEDIADYYCQSHSWP 115

RESULT 2
AARI0984
ID AARI0984 PRELIMINARY; PRT; 111 AA.
AC AARI0984;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.S1e1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.S1e1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436824; AARI0984.1; -.
FT NON_TER 1 1
FT NON_TER 111 111
SQ SEQUENCE 111 AA; 11972 MW; 5DB83593574700EF CRC64;

Query Match 72.5%; Score 404; DB 2; Length 111;
Best Local Similarity 69.5%; Pred. No. 7.8e-34;
Matches 73; Conservative 18; Mismatches 14; Indels 0; Gaps 0;

Qy 3 LLTQSPAILSVSPGERVFSFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPSRF 62
Dy 1 VMTQTPATLSVTPGDRVLSLCRASQSIDYLVHWYQKSHSPRLLIKYASQISGIPSRF 60
Qy 63 SGSGSGDTFTLSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
Dy 61 SGSGSGDTFTLSINTVESEDIADYYCQSHSWPFTFGAGTKLEIK 105

RESULT 3
AARI1050
ID AARI1050 PRELIMINARY; PRT; 105 AA.
AC AARI1050;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.S1e1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.S1e1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
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RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436890; AARI1050.1; -.
FT NON_TER 1 1
FT NON_TER 105 105
SQ SEQUENCE 105 AA; 11377 MW; 9698895429461258 CRC64;

Query Match 69.4%; Score 386.5; DB 2; Length 105;
Best Local Similarity 70.3%; Pred. No. 4.7e-32;
Matches 71; Conservative 18; Mismatches 11; Indels 1; Gaps 1;

Qy 7 SPAILSVSPGERVFSFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPSRFSGSG 66
Dy 1 TPAILSVTPGDSVLSLCRASQSIDYLVHWYQKSHSPRLLIKYASQISGIPSRFSGSG 60
Qy 67 SGTFTLSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 107
Dy 61 SGTFTLSINTVESEDIADYYCQSHSWPFTFGSGTNLEVK 100

RESULT 4
AARI0988
ID AARI0988 PRELIMINARY; PRT; 101 AA.
AC AARI0988;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.S1e1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.S1e1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436828; AARI0988.1; -.
FT NON_TER 1 1
FT NON_TER 101 101
SQ SEQUENCE 101 AA; 10918 MW; 28B1625B74125F70 CRC64;

Query Match 67.0%; Score 373; DB 2; Length 101;
Best Local Similarity 70.1%; Pred. No. 1.1e-30;
Matches 68; Conservative 16; Mismatches 13; Indels 0; Gaps 0;

Qy 3 LLTQSPAILSVSPGERVFSFCRASQFVGSSIHVYQORTNGSPRLLIKYASESMGIPSRF 62
Dy 1 VMTQTPATLSVTPGDRVLSLCRASQSIDYLVHWYQKSHSPRLLIKYASQISGIPSRF 60
Qy 63 SGSGSGDTFTLSINTVESEDIADYYCQSHSWPFTFG 99
Dy 61 SGSGSGDTFTLSINTVESEDIADYYCQSHSWPFTFG 97

RESULT 5
AARI1029
ID AARI1029 PRELIMINARY; PRT; 103 AA.
AC AARI1029;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.S1e1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.S1e1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
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DR EMBL; AY436869; AAR11029.1; -.
FT NON_TER 1
FT NON_TER 103
SQ SEQUENCE 103 AA; 11064 MW; C3D2C4D1B230F426 CRC64;

Query Match
Best Local Similarity 66.4%; Score 370; DB 2; Length 103;
Matches 70; Conservative 14; Mismatches 17; Indels 0; Gaps 0;

QY 1 DILTSQPAILSVSPGERVFSFSCRASQFVGGSSIHVYQORTNGSPRLLIKVASMSGIPSRF 60
   :::::::::::::::::::::
Db 1 DIVIGQSPDILSVTPGDSVLSCKASQNSGNLNLHWYQQRSHSPRLLIKASQSIGIPS 60
   :::::::::::::::::::::

QY 61 RFGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 101
   :::::::::::::::::::::
Db 61 RFGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 101
   :::::::::::::::::::::

RESULT 6
AAR11037
ID AAR11037 PRELIMINARY; PRT; 96 AA.
AC AAR11037;
DT 02-MAR-2004 (TReMBLrel. 27, Created)
DT 02-MAR-2004 (TReMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TReMBLrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.Sle1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.Sle1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436877; AAR11037.1; -.
FT NON_TER 1
FT NON_TER 96
SQ SEQUENCE 96 AA; 10432 MW; 6B2F60254DBD5515 CRC64;

Query Match
Best Local Similarity 65.5%; Score 365; DB 2; Length 96;
Matches 66; Conservative 16; Mismatches 13; Indels 0; Gaps 0;

QY 3 LITQSPAILSVSPGERVFSFSCRASQFVGGSSIHVYQORTNGSPRLLIKVASMSGIPSRF 62
   :::::::::::::::::::::
Db 1 VMTQTPATLSVTPGDRVLSCKASQNSIDYHLHWYQQRSHSPRLLIKVASQSIGIPSRF 60
   :::::::::::::::::::::

QY 63 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 97
   :::::::::::::::::::::
Db 61 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 95
   :::::::::::::::::::::

RESULT 7
AAR11035
ID AAR11035 PRELIMINARY; PRT; 105 AA.
AC AAR11035;
DT 02-MAR-2004 (TReMBLrel. 27, Created)
DT 02-MAR-2004 (TReMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TReMBLrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.Sle1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.Sle1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436875; AAR11035.1; -.

Query Match
Best Local Similarity 65.4%; Score 364.5; DB 2; Length 103;
Matches 69; Conservative 15; Mismatches 16; Indels 3; Gaps 1;

QY 4 LTQSPAILSVSPGERVFSFSCRASQFVGGSSIHVYQORTNGSPRLLIKVASMSGIPSRFS 63
   :::::::::::::::::::::
Db 1 MTQTPATLSVTPGDRVLSCKASQNSIDYHLHWYQQRSHSPRLLIKVASQSIGIPSRFS 60
   :::::::::::::::::::::

QY 64 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 103
   :::::::::::::::::::::
Db 61 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 103
   :::::::::::::::::::::

RESULT 8
AAR11007
ID AAR11007 PRELIMINARY; PRT; 103 AA.
AC AAR11007;
DT 02-MAR-2004 (TReMBLrel. 27, Created)
DT 02-MAR-2004 (TReMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TReMBLrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.Sle1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.Sle1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436847; AAR11007.1; -.
FT NON_TER 1
FT NON_TER 103
SQ SEQUENCE 103 AA; 11029 MW; 0D7AB0DE9983992B CRC64;

Query Match
Best Local Similarity 65.4%; Score 364.5; DB 2; Length 103;
Matches 69; Conservative 15; Mismatches 16; Indels 3; Gaps 1;

QY 4 LTQSPAILSVSPGERVFSFSCRASQFVGGSSIHVYQORTNGSPRLLIKVASMSGIPSRFS 63
   :::::::::::::::::::::
Db 1 MTQTPATLSVTPGDRVLSCKASQNSIDYHLHWYQQRSHSPRLLIKVASQSIGIPSRFS 60
   :::::::::::::::::::::

QY 64 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 103
   :::::::::::::::::::::
Db 61 SGSGSGDTFTLSINTVSEDIADYYCQOSHSPFTFGSG 103
   :::::::::::::::::::::

RESULT 9
AAR11026
ID AAR11026 PRELIMINARY; PRT; 95 AA.
AC AAR11026;
DT 02-MAR-2004 (TReMBLrel. 27, Created)
DT 02-MAR-2004 (TReMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TReMBLrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.Sle1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hsu K., Zhou J.X., Mohan C.;
RT "Antinuclear autoantibodies from B6.Sle1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436866; AAR11026.1; -.
FT NON_TER 1
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RESULT 11
KV3F_HUMAN
ID KV3F_HUMAN STANDARD; PRT; 109 AA.
AC P01624;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DE OS Ig kappa chain V-III region POM.
DE OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=76276460; PubMed=60899;
RA Klapper D.G., Capra J.D.;
RT "the amino acid sequence of the variable regions of the light chains
RT from two idiotypically cross reactive IgM anti-gamma globulins.";
RL Ann. Immunol. (Paris) 127C:261-271(1976).
RC -!- MISCELLANEOUS: This chain was isolated from an Igm with anti-gamma
CC Globulin activity.
PIR; A01897; K3HUPM.
DR HSSP; P01625; 1LVE.
DR GO; GO:0005576; C:extracellular; NAS.
DR GO; GO:0003823; P:antigen binding; NAS.
DR GO; GO:0006955; P:immune response; NAS.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig_1.
DR SMART; SMO0406; IGV; 1.
DR PROSITE; PS0835; IG_LIKE; 1.
DR Direct protein sequencing; Immunoglobulin V region.
FT DISULFD 23 89 By similarity.
FT NON_TER 109 102
FT SEQUENCE 109 AA; 11922 MW; 52821DDC6A8A86 CRC64;

Query Match 64.0%; Score 356.5; DB 1; Length 109;
Best Local Similarity 62.0%; Pred. NO. 6.1e-29;
Matches 67; Conservative 21; Mismatches 19; Indels 1; Gaps 1;

QY 1 DILTQSPATLSVPSGRVFSFCRSQFVGSS-IHWYQQTNGSPRLLIKVASBSMSGIP 59
DB 1 EIVMTQSPVTLSPGERATLSCRAQSISNLYLAWYQKSGSPRLLIYGASTATGIP 60
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
60 SRFGSGSGDTFLSINTVSESDIADYCCQSHSWPFTFGSGTNIENVK 107
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
61 ARFGSGSGTEFTLTISLQSEDFAVYYCQYNWNPPTFGQTRVEIK 108

RESULT 12
Q9UL83
ID Q9UL83 PRELIMINARY; PRT; 108 AA.
AC Q9UL83;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Myosin-reactive immunoglobulin light chain variable region
DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=9827139; PubMed=9614934;
RA Wu X., Liu B., Van der Merwe P.L., Kalis N.N., Berney S.M.,
RA Young D.C.;
RT "Myosin-reactive autoantibodies in rheumatic carditis and normal
RT fetus";
RL Clin. Immunol. Immunopathol. 87:184-192(1998).
DR EMBL; AF035031; AAD56267.1; -.
DR PIR; B30609; B30609.

```

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DR PIR; C30609; C30609.
DR PIR; D30609; D30609.
DR PIR; S34098; S34098.
DR PIR; S34099; S34099.
DR HSP; P01625; I1VE.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; Ig; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS50835; IG_LIKE; 1.
FT NON_TER 1
FT NON_TER 108
FT NON_TER 108
SQ SEQUENCE 108 AA; 11034 MW; 9F9C5A92EBA96EBA CRC64;

Query Match 63.6%; Score 356; DB 2; Length 108;
Best Local Similarity 60.7%; Pred. No. 6.8e-29;
Matches 65; Conservative 21; Mismatches 21; Indels 0; Gaps 0;

Qy 1 DILLTQSPAILSVSPGSRVFSFCRASQFVGSSIHVYQOQTNGSPRLIKYASESMGIP 60
Db 1 EIVMTQSPAILSVSPGSRVFSFCRASQFVGSSIHVYQOQTNGSPRLIKYASESMGIP 60

Qy 61 RFGSGSGTPTLSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 RFGSGSGTPTLSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107

RESULT 13
ID Q8K1F1 PRELIMINARY; PRT; 114 AA.
AC Q8K1F1;
DT 01-OCT-2002 (TReMBLrel. 22, Created)
DT 01-OCT-2002 (TReMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TReMBLrel. 22, Last annotation update)
DE Anti-VIPase light chain variable region (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/c; TISSUE=Hyperimmunized spleen;
RA Zhou Y.-X., Taguchi H., Pianque S., Karle S., Nishiyama Y., Paul S.;
RL Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF516284; AAM64202.1; -.
DR PIR; A33933;
DR PIR; PH1058; PH1058.
DR HSP; P01837; 25C8.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; Ig; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS50835; IG_LIKE; 1.
FT NON_TER 1
FT NON_TER 114
FT NON_TER 114
SQ SEQUENCE 114 AA; 12162 MW; 8BD9833DBF3EEFD1 CRC64;

Query Match 63.6%; Score 354.5; DB 2; Length 114;
Best Local Similarity 61.1%; Pred. No. 1e-28;
Matches 66; Conservative 20; Mismatches 21; Indels 1; Gaps 1;

Qy 1 DILLTQSPAILSVSPGSRVFSFCRASQFVGSS-IHVYQOQTNGSPRLIKYASESMGIP 59
Db 1 DIVLTQSPAILSVSPGSRVFSFCRASQFVGSS-IHVYQOQTNGSPRLIKYASESMGIP 59

Qy 60 SRPFGSGSGTPTLSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 107
Db 61 ARPFGSGSGTPTLSINTVSESDIADYCCQSHSWPFTFGSGTNLEVK 108

RESULT 14
AAR11047
ID AAR11047 PRELIMINARY; PRT; 98 AA.
AC AAR11047;
DT 02-MAR-2004 (TReMBLrel. 27, Created)
DT 02-MAR-2004 (TReMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TReMBLrel. 27, Last annotation update)
DE ANA immunoglobulin kappa light chain (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=B6.Sle1; TISSUE=Spleen;
RA Liang Z., Xie C., Chen C., Kreska D., Hau K., Zhou J.X., Mohan C.;
RL "Antinuclear autoantibodies from B6.Sle1 mice.";
RL Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY436887; AAR11047.1; -.
DR NON_TER 1
DR NON_TER 98
DR NON_TER 98
SQ SEQUENCE 98 AA; 10636 MW; 6850A3AB53C66D39 CRC64;

Query Match 63.6%; Score 354; DB 2; Length 98;
Best Local Similarity 68.4%; Pred. No. 9.8e-29;
Matches 67; Conservative 13; Mismatches 18; Indels 0; Gaps 0;

Qy 8 PAILSVSPGSRVFSFCRASQFVGSSIHVYQOQTNGSPRLIKYASESMGIPSRFGSGS 67
Db 1 PATLSVTPEDIVLSLCRASQFVGSSIHVYQOQTNGSPRLIKYASESMGIPSRFGSGS 60

Qy 68 GTDFTLSINTVSESDIADYCCQSHSWPFTFGSGTNLE 105
Db 61 GSYFTLSINTVSESDIADYCCQSHSWPFTFGSGTNLE 98

RESULT 15
Q6GMW0
ID Q6GMW0 PRELIMINARY; PRT; 235 AA.
AC Q6GMW0;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Sanchez A.,
RA Faney J., Helton E., Kettman M., Madan A.C., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A.C., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RA Strausberg R.;
```

RL Submitted (JUN-2004) to the EMBL/GenBank/DBSJ databases.

DR EMBL; BC073792; AAH73792.1; -.

DR InterPro; IPR003599; Ig.

DR InterPro; IPR007110; Ig-like.

DR InterPro; IPR003597; Ig_cl.

DR InterPro; IPR003006; Ig_MHC.

DR InterPro; IPR003596; Ig_v.

DR Pfam; PF07654; C1-set; 1.

DR pfam; PF00047; ig; 2.
DB CM3PT. CM000400. IC. 3

DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IG; 1.

DR SMART; SM00407; IGcl; 1.
DR SMART; SM00406; IGv; 1

DR SMART; SM00406; IGV; 1.
DR PROSTTE; PS50835; IGV; 2.

| | |
|----|-----------------------------------|
| DR | PROSITE: PS50835; IG_LIKE; 2. |
| DR | PROSITE: PS00290; IG_MHC; UNKNOWN |

DR PROSITE; PS00290; IG_MHC; UNKNOWN_1.
KW Hypothetical protein.

SEQUENCE 235 AA; 25765 MW;

[illegible]

Query Match 62.6%; Score 348.5; DB 2; Length 235;

Best Local Similarity 61.1%; Pred. No. 9.8e-28;

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Matches 66; Conservative 20; Mismatches 21; Indels 1; Gaps 1;
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1 DILLTQSPAILSVSPGERSVFCRASQFVGSSIHVYQORTNGSPRLLIKAYSESMSGIPS 60 QY

db 21 EIVMTQSPATLSVSPGERATLSCRASQISNNLAWYQORPGQAPRLIYGASRVTGPG 80

61 RFSGSGSGTFTISINTVSESDIADYYCQSHSW - PFTFGSGTNLEVK 107

81 RFSGSGSGTEFTLSISLSEDEFAVFCQYNDWLLYTFGGTKLEIK 128

Search completed: December 15, 2004, 17:20:53

Job time : 119.836 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 15, 2004, 17:01:09 ; Search time 117.947 Seconds
(without alignments)
361.932 Million cell updates/sec

Title: US-09-897-724-5

Sequence: 1 EVKLESGGLVPGGSMKL.....RNYGSTDYWGQGTTLTVS 119

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1980s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|--------------------|
| 1 | 636 | 100.0 | 119 | 2 | AAW28532 Humanised |
| 2 | 636 | 100.0 | 119 | 2 | AAW40821 Heavy cha |
| 3 | 636 | 100.0 | 119 | 2 | AAW23244 Heavy cha |
| 4 | 636 | 100.0 | 119 | 4 | AAW79126 Amino aci |
| 5 | 636 | 100.0 | 119 | 4 | AAW10850 Mouse hea |
| 6 | 636 | 100.0 | 119 | 4 | AAW67763 Anti-TNF |
| 7 | 636 | 100.0 | 119 | 5 | ABG70573 Human-mur |
| 8 | 636 | 100.0 | 119 | 5 | ABP54871 Murine an |
| 9 | 636 | 100.0 | 119 | 5 | AAW47942 ChimERIC |
| 10 | 636 | 100.0 | 119 | 6 | ABU09890 Mouse TNF |
| 11 | 636 | 100.0 | 119 | 6 | ABG72949 ChimERIC |
| 12 | 636 | 100.0 | 119 | 6 | ABG75767 CA2 varia |
| 13 | 636 | 100.0 | 119 | 6 | ABG75774 CA2 varia |
| 14 | 636 | 100.0 | 119 | 6 | ABU63588 Mouse CA2 |
| 15 | 636 | 100.0 | 119 | 7 | ADC46572 Mouse CA2 |
| 16 | 636 | 100.0 | 119 | 7 | ADC61358 Cloned mu |
| 17 | 636 | 100.0 | 119 | 7 | ADD44658 Human CA2 |
| 18 | 636 | 100.0 | 119 | 7 | ABW02402 Murine an |
| 19 | 636 | 100.0 | 119 | 7 | ADW96352 ChimERIC |
| 20 | 636 | 100.0 | 119 | 7 | ABW02037 Murine an |
| 21 | 636 | 100.0 | 119 | 7 | ADW91150 CA2 heavy |
| 22 | 636 | 100.0 | 119 | 7 | ADG27432 Mouse mon |
| 23 | 636 | 100.0 | 119 | 7 | ADJ63989 Murine V |
| 24 | 636 | 100.0 | 119 | 7 | ADM15646 Murine he |
| 25 | 636 | 100.0 | 119 | 7 | ADM83151 Murine co |

| | | | | | |
|----|-------|-------|-----|---|----------------------|
| 26 | 636 | 100.0 | 119 | 8 | ADF89618 Mouse ant |
| 27 | 636 | 100.0 | 119 | 8 | ADH89385 Human tra |
| 28 | 636 | 100.0 | 119 | 8 | ADI29707 Anti-TNFA |
| 29 | 636 | 100.0 | 119 | 8 | ADL70772 Anti-TNFA |
| 30 | 636 | 100.0 | 226 | 6 | ABR55861 Remicade |
| 31 | 636 | 100.0 | 226 | 8 | ADN49714 Human ant |
| 32 | 636 | 100.0 | 240 | 8 | ADH89383 Human tra |
| 33 | 595 | 93.6 | 120 | 7 | ADI57802 Monoclonona |
| 34 | 585 | 92.0 | 120 | 7 | ADI57803 Monoclonona |
| 35 | 581 | 91.4 | 120 | 7 | ADI57801 Monoclonona |
| 36 | 559 | 87.9 | 120 | 7 | ADI57804 Monoclonona |
| 37 | 550 | 86.5 | 120 | 8 | ADQ92335 Human hul |
| 38 | 550 | 86.5 | 120 | 8 | ADQ80524 Hul heavy |
| 39 | 545 | 85.7 | 120 | 8 | ADQ92339 Human A10 |
| 40 | 545 | 85.7 | 120 | 8 | ADQ80528 A10K heav |
| 41 | 538.5 | 84.7 | 119 | 2 | AAW46958 Amino aci |
| 42 | 529 | 83.2 | 256 | 5 | AAU72866 P5-3 sing |
| 43 | 529 | 83.2 | 503 | 5 | AAU72874 3B10xP5-2 |
| 44 | 522.5 | 82.2 | 123 | 6 | ABO10742 Variable |
| 45 | 522.5 | 82.2 | 123 | 6 | ABR44686 Murine MU |

ALIGNMENTS

RESULT 1
AAW28532
ID AAW28532 standard; protein; 119 AA.
XX AC
XX AAW28532;
XX AC
XX 25-MAR-2003 (revised)
DT 12-JAN-1998 (first entry)
XX XX
DE Humanised CA2 heavy chain variable region.
XX TNF; tumour necrosis factor; Crohn's disease; CA2 antibody.
XX Synthetic.
XX US5656272-A.
XX 12-AUG-1997.
XX 04-FEB-1994; 94US-00192102.
XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 26-JAN-1993; 93US-00010406.
02-FEB-1993; 93US-00013413.
XX
(GENZ) CENTOCOR INC.
PA (OJNY-) UNIV NEW YORK MEDICAL CENT.

XX Dadonna P, Le J, Ghayeb J, Knight D, Siegel SA, Vilcek J;
WPI; 1997-414547/38.

XX N-PSDB; AAT87442.

XX Treatment of Crohn's disease - by administering humanised CA2 antibody specific for tumour necrosis factor.
XX Disclosure; Fig 16B; 87pp; English.

XX An anti-TNF chimeric antibody may be administered for treating TNF-alpha mediated Crohn's disease in a human. The anti-TNF chimeric antibody competitively inhibits binding of TNF to monoclonal antibody CA2. The anti-TNF antibody does not bind to one or more epitopes in amino acids 11-13, 37-42, 49-57 or 155-157 of hTNF, but does bind to one or more epitopes included in amino acids between 87-108 or both 87-108 and 59-80 of hTNF. (Updated on 25-MAR-2003 to correct PF field.)

SQ Sequence 119 AA;
Query Match 100.0%; Score 636; DB 2; Length 119;
Best Local Similarity 100.0%; Pred. No. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVAGSIFSNHNNWVRQSPKGLWVAEIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVAGSIFSNHNNWVRQSPKGLWVAEIRSKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 2
AAW40821
ID AAW40821 standard; peptide; 119 AA.
XX AAW40821;
AC
XX
DT 02-APR-1998 (first entry)
XX
DE Heavy chain variable region used in chimeric antibody.
XX
KW Tumour necrosis factor; human; hTNF; rheumatoid arthritis; malignancy;
KW anti-TNF chimeric antibody; inhibitor; therapy; diagnosis; infection;
KW chronic inflammatory disease; autoimmune disease; heavy chain;
KW neurodegenerative disease; variable region.
XX
OS Mus sp.
XX
FN US5698195-A.
PD 16-DEC-1997.
PF 18-OCT-1994; 94US-00324799.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192061.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
XX
PA (CENZ) CENTOCOR INC.
PA (UTNY-) UNIV NEW YORK MEDICAL CENT.
XX
PI Siegel S, Knight D, Vilcek J, Ghayeb J, Le J, Daddona P;
XX
XX WPI; 1998-051431/05.
DR N-PSDB; AAV03616.
XX
PT Treatment of rheumatoid arthritis - with chimeric antibody directed
PT against tumour necrosis factor.
XX
XX Claim 13; Col 101-102; 93pp; English.

This sequence represents the variable heavy chain of a mouse antibody.
This sequence can be used as part of the chimeric antibody used in the
method of the invention. The method of the invention is for treating
rheumatoid arthritis in a human, and comprises administering to the human
an effective tumour necrosis factor- (TNF) inhibiting amount of an anti-
TNF chimeric antibody (Ab), where the anti-TNF chimeric Ab comprises a
non-human variable region or a TNF antigen binding portion of the
variable region, and a human constant region. The method can be used for
in vitro, in situ and/or in vivo diagnosis and/or treatment of animal
cells, tissues or pathologies associated with the presence of TNF. The
Abs used in the method can also be used for removing TNF from a solution
or cells, inhibiting one or more biological activities of TNF in vitro,
in situ or in vitro. Such removal can include treatment methods of the

CC invention for alleviating symptoms or pathologies involving TNF, such as
CC bacterial, viral or parasitic infections, chronic inflammatory diseases,
CC autoimmune diseases, malignancies and/or neurodegenerative diseases
XX
SQ Sequence 119 AA;
Query Match 100.0%; Score 636; DB 2; Length 119;
Best Local Similarity 100.0%; Pred. No. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVAGSIFSNHNNWVRQSPKGLWVAEIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVAGSIFSNHNNWVRQSPKGLWVAEIRSKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 3
AAW23244
ID AAW23244 standard; protein; 119 AA.
XX AAW23244;
AC
XX
DT 27-AUG-1999 (first entry)
XX
DE Heavy chain variable region of monoclonal antibody ca2.
XX
KW Human tumour necrosis factor-alpha; TNF-alpha; immune disease;
KW TNF-alpha mediated disease; anti-TNF chimeric antibody;
KW monoclonal antibody ca2; autoimmune disease; inflammatory disease;
KW neurodegenerative disorder; cerebellar cortical degeneration;
KW multiple system degeneration; multi-system disorder; Senile Dementia;
KW amyotrophic lateral sclerosis; spinal muscular atrophy;
KW Alzheimer's disease; Down's Syndrome; Diffuse Lewy body disease;
KW Wernicke-Korsakoff syndrome; Chronic alcoholism;
KW lymphoma Creutzfeldt-Jakob disease;
KW sub-acute sclerosing panencephalitis; Hallerorden-Spatz disease;
KW dementia pugilistica; leukemia.
XX
OS Mus sp.
XX
PN US5919452-A.
PD 06-JUL-1999.
XX
PF 04-FEB-1994; 94US-00192861.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
XX
PA (CENZ) CENTOCOR INC.
PA (UTNY) UNIV NEW YORK STATE.
XX
PI Daddona P, Le J, Ghayeb J, Knight D, Seigal S, Vilcek J;
XX
XX WPI; 1999-403943/34.
DR N-PSDB; AAX81706.
XX
PT Treatment of tumor necrosis factor-alpha mediated disease using chimeric
PT antibodies.
XX
XX Claim 6; Fig 16B; 90pp; English.

The present sequence represents the heavy chain variable region of
monoclonal antibody ca2. The specification describes a method for
treating tumour necrosis factor-alpha (TNF-alpha) mediated disease (not
resulting from infection) using an anti-TNF chimeric antibody that
inhibits the binding of TNF to monoclonal antibody ca2. The methods and

chimeric antibodies are useful for treating and/or diagnosing TNF-alpha mediated diseases such as immune and autoimmune pathologies e.g. rheumatoid arthritis and especially systemic lupus erythematosus (SLE), thyroiditis, graft versus host disease, scleroderma, diabetes mellitus, Crohn's disease, inflammatory diseases (other than septic shock), neurodegenerative disorders, cerebellar cortical degenerations, multiple systems degenerations (e.g. Mancel, Dejerine-Thomas, Shi-Drager, and Machado-Joseph), Refsum's disease, abetalipoproteinemia, ataxia, telangiectasia, mitochondrial multi-system disorder, amyotrophic lateral sclerosis, infantile and juvenile spinal muscular atrophy, Alzheimer's disease, Down's Syndrome in middle age, Diffuse Lewy body disease, Senile Dementia of Lewy body type, Wernicke-Korsakoff syndrome, chronic alcoholism, Creutzfeldt-Jakob disease, sub-acute sclerolosing panencephalitis, Hallerorden-Spatz disease, dementia pugilistica, leukemias, lymphomas, other TNF-secreting tumors or alcohol-induced hepatitis

Query Match 100.0%; Score 636; DB 2; Length 119;
Best Local Similarity 100.0%; Pred. No. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EVKLESGGGLVQPGGSMKLSVCVAGGTFPSNHNWVWVRSPEKGLWVAEIRSKINSAT 60
DB 1 EVKLESGGGLVQPGGSMKLSVCVAGGTFPSNHNWVWVRSPEKGLWVAEIRSKINSAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 4
AAG79126
ID AAG79126 standard; protein; 119 AA.
AC AAG79126;
XX
DT 11-SEP-2003 (revised)
DT 03-JAN-2002 (first entry)
XX
DE Amino acid sequence of cloned ch2 heavy chain variable region.

Human; tumour necrosis factor-alpha; TNF-alpha; chimeric antibody; immunoglobulin; inflammation; cancer; cachexia; sepsis; endotoxic shock; infection; chronic inflammatory disease; auto-immune disease; malignancy; neurodegenerative disease; Crohn's disease; rheumatoid arthritis; A2; vascular endothelial growth factor; VEGF; VEGF-mediated disease.

XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.

XX
PN US2001027249-A1.

XX
PD 04-OCT-2001.

XX
PF 08-JAN-2001; 2001US-00756301.

XX
PR 18-MAR-1991; 91US-00670827.

XX
PR 18-MAR-1992; 92US-00853606.

XX
PR 11-SEP-1992; 92US-00943852.

XX
PR 29-JAN-1993; 93US-00010406.

XX
PR 02-FEB-1993; 93US-00013413.

XX
PR 04-FEB-1994; 94US-00192093.

XX
PR 04-FEB-1994; 94US-00192102.

XX
PR 04-FEB-1994; 94US-00192861.

XX
PR 11-DEC-1994; 94US-00324799.

XX
PR 11-DEC-1995; 95US-00570674.

XX
PR 12-AUG-1998; 98US-00133119.

(CENZ) CENTOCOR INC.

PI Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX
WPI; 2001-615872/71.
DR N-P8DB; AA165696.

XX
PT New chimeric antibody binding an epitope specific for human tumor
PT necrosis factor alpha useful in treatment and diagnosis of tumor necrosis
PT factor alpha related conditions e.g. Crohn's disease.

XX
Claim 40; Fig 16B; 93pp; English.

XX
The present sequence represents the heavy chain variable region of a
CC chimeric human-murine A2 antibody (cA2) which binds to epitopes of human
CC tumour necrosis factor (TNF)-alpha. Chimeric antibodies of the invention
CC comprise at least part of a human immunoglobulin constant region and at
CC least part of a non-human immunoglobulin variable region. The chimeric
CC antibodies are useful in vivo diagnosis and therapy of TNF-alpha-mediated
CC pathologies and conditions. They can also neutralize human TNF-alpha
CC under physiological conditions. This is useful as TNF is known to be
CC involved in e.g. pro-inflammatory actions, wasting associated with cancer
CC and other diseases (cachexia), gram-negative sepsis and endotoxic shock.
CC Antibodies can be used to treat and/or diagnose bacterial, parasitic or
CC viral infections, chronic inflammatory diseases, auto-immune diseases,
CC malignancies and neurodegenerative diseases (such as Crohn's disease and
CC rheumatoid arthritis). As inhibition or antagonism of TNF also decreases
CC the expression of vascular endothelial growth factor (VEGF), the
CC antibodies are also useful to treat VEGF-mediated diseases. (Updated on
CC 11-SEP-2003 to standardise OS field)

XX
SQ Sequence 119 AA;

Query Match 100.0%; Score 636; DB 4; Length 119;
Best Local Similarity 100.0%; Pred. No. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLESGGGLVQPGGSMKLSVCVAGGTFPSNHNWVWVRSPEKGLWVAEIRSKINSAT 60
DB 1 EVKLESGGGLVQPGGSMKLSVCVAGGTFPSNHNWVWVRSPEKGLWVAEIRSKINSAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 5

AAE10850

ID AAE10850 standard; protein; 119 AA.

XX
AC AAE10850;

XX
DT 18-DEC-2001 (first entry)

XX
DE Mouse heavy chain variable region of chimeric A2 anti-TNF antibody.

XX
KW Human; tumour necrosis factor; antifungal; antiviral; leukaemia;
KW antiparasitic; immune disorder; autoimmune disorder; infection;
KW systemic lupus erythematosus; rheumatoid arthritis; antibacterial;
KW inflammatory disease; ulcerative colitis; neurodegenerative disease;
KW multiple sclerosis; cerebellar disorder; alcohol-induced hepatitis;
KW lymphoma; mouse; anti-TNF antibody; heavy chain variable region;
KW chimeric; TNF alpha.

XX
OS Mus sp.

XX
PN US6284471-B1.

XX
PD 04-SEP-2001.

XX
PF 04-FEB-1994; 94US-00192093.

XX
PR 18-MAR-1991; 91US-00670827.

XX
PR 18-MAR-1992; 92US-00853606.

XX
PR 11-SEP-1992; 92US-00943852.

PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 XX (UUNY-) UNIV NEW YORK MEDICAL CENT.
 PA (CENZ) CENTOCOR INC.
 XX Le J, Vilcek J, Daddona P, Ghraieb J, Knight D, Siegel SA;
 PI WPI; 2001-595467/67.
 XX N-PSDB; AAD18193.
 DR Chimexic anti-tumor necrosis factor (TNF) antibodies useful for
 XX diagnosing or treating TNF-associated pathologies or conditions, e.g.
 PT chronic and acute immune, autoimmune disorders, and microbial infections.
 XX Claim 9; Fig 16B; 87pp; English.
 PS The invention relates to chimeric anti-tumor necrosis factor (TNF)
 CC antibodies. These chimeric antibodies comprises two light chains and two
 CC heavy chains, each of the chains comprising at least part of a human
 CC immunoglobulin (Ig) constant region and at least part of a non-human Ig
 CC variable region, where the antibodies are capable of binding an epitope
 CC specific for human TNF-alpha. Anti-TNF antibodies or peptides may be used
 CC in research, therapeutic and diagnostic methods, specifically for
 CC diagnosing and/or treating animals or human having pathologies or
 CC conditions associated with the presence of a substance reactive with an
 CC anti-TNF antibody. TNF-related pathologies include acute and chronic
 CC immune and autoimmune disorders (e.g. systemic lupus erythematosus,
 CC rheumatoid arthritis), infections (e.g. bacterial, viral, fungal or
 CC parasitic infections), inflammatory diseases (e.g. ulcerative colitis,
 CC Crohn's pathology), neurodegenerative diseases (e.g. multiple sclerosis,
 CC chorea or senile chorea, disorders of the basal ganglia or cerebellar
 CC disorders), malignant pathologies (e.g. leukaemia, lymphomas), or alcohol
 CC -induced hepatitis. The anti-TNF peptide or antibodies may also be used
 CC for immunoassays, which detect or quantitate TNF or anti-TNF antibodies.
 CC The present sequence is mouse heavy chain variable region of chimeric A2
 CC anti-TNF antibody
 XX Sequence 119 AA;
 SQ Query Match 100.0%; Score 636; DB 4; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFI FSNHNMWVRQSPKGLWVAEIRSKINSAT 60
 DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFI FSNHNMWVRQSPKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYDWGQGTTLTVS 119
 DB 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYDWGQGTTLTVS 119
 RESULT 6
 AAG67763
 ID AAG67763 standard; protein; 119 AA.
 AC AAG67763;
 XX 10-DEC-2001 (first entry)
 XX Anti-TNF antibody CA2 heavy chain variable region.
 XX Human; tumour necrosis factor; TNF; anti-TNF antibody; CA2; infection;
 KW sepsis; cachexia; acquired immunodeficiency syndrome; AIDS; septic shock;
 KW chronic inflammatory disease; disseminated intravascular coagulation;
 KW atherosclerosis; ulcerative colitis; chronic inflammatory bowel disease;
 KW autoimmune disease; rheumatoid arthritis; diabetes mellitus;
 KW graft versus host disease; Grave's disease; alcohol-induced hepatitis;
 KW malignancy; neurodegenerative disease; multiple sclerosis;
 KW demyelinating disease; acute transverse myelitis;
 KW vascular endothelial growth factor-mediated disease;
 KW VEGF-mediated disease.

XX Mus sp.
 OS US6277969-B1.
 XX 21-AUG-2001.
 PD 12-AUG-1998; 98US-00133119.
 XX 18-MAR-1991; 91US-00670927.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 XX (UUNY) UNIV NEW YORK STATE.
 PA (CENZ) CENTOCOR INC.
 PA (UUNY-) UNIV NEW YORK MEDICAL CENT.
 XX Le J, Vilcek J, Daddona P, Ghraieb J, Knight D, Siegel S;
 PI WPI; 2001-588928/66.
 DR N-PSDB; AAH78593.
 XX New nucleic acid molecule encoding heavy or light chain variable regions
 PT of anti-tumor necrosis factor antibody, useful for alleviating symptoms
 PT or pathologies involving tumor necrosis factor.
 XX Claim 3; Fig 16B; 94pp; English.
 XX The present sequence represents the cloned heavy chain variable region of
 CC antibody CA2, which is directed against tumour necrosis factor (TNF). The
 CC specification describes anti-TNF antibodies, such as CA2. The anti-TNF
 CC antibody is useful for alleviating symptoms or pathologies involving TNF,
 CC such as bacterial, viral or parasitic infections (e.g. sepsis, cachexia,
 CC acquired immunodeficiency syndrome (AIDS) and septic shock), chronic
 CC inflammatory diseases (disseminated intravascular coagulation,
 CC atherosclerosis, ulcerative colitis and chronic inflammatory bowel
 CC disease), autoimmune diseases (e.g. rheumatoid arthritis, diabetes
 CC mellitus, graft versus host disease and Grave's disease), alcohol-induced
 CC hepatitis, malignancies and/or neurodegenerative diseases (e.g. multiple
 CC sclerosis, demyelinating diseases and acute transverse myelitis). The
 CC anti-TNF antibody is also useful in the treatment of vascular endothelial
 CC growth factor (VEGF)-mediated diseases
 XX Sequence 119 AA;
 SQ Query Match 100.0%; Score 636; DB 4; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFI FSNHNMWVRQSPKGLWVAEIRSKINSAT 60
 DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFI FSNHNMWVRQSPKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYDWGQGTTLTVS 119
 DB 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYDWGQGTTLTVS 119
 RESULT 7
 AAG70573
 ID AAG70573 standard; protein; 119 AA.
 XX AAG70573;
 XX 28-NOV-2002 (first entry)
 XX Anti-TNF antibody CA2 heavy chain variable region.

Human-murine chimeric anti-hTNFalpha CA2 heavy chain variable region.

Human; tumour necrosis factor-alpha; TNFalpha; anti-TNF antibody;
 anti-TNF peptide; neurodegenerative disease; multiple sclerosis;
 acquired immunodeficiency syndrome; AIDS; demyelinating disease;
 acute transverse myelitis; extrapyramidal disorder; lesion;
 cerebellar disorder; basal ganglia disorder; Huntington's chorea;
 movement disorder; senile chorea; Parkinson's disease; spinal ataxia;
 progressive supranuclear palsy; spinocerebellar degeneration;
 systemic disorder; neurogenic muscular atrophy; Down's Syndrome;
 amyotrophic lateral sclerosis; Alzheimer's disease; chronic alcoholism;
 Creutzfeldt-Jakob disease; Hallervorden-Spatz disease; neuroleptic;
 neurotropic; neuroprotective; antiparkinsonian; human TNFalpha; hTNFalpha;
 murine; mouse; CA2; chimeric A2; heavy chain variable region; mutant;
 anti-human TNF IgG1 antibody; IgG1 kappa; mutein.

Homo sapiens.
 Mus sp.
 Synthetic.
 Chimeric.

US2002106372-A1.
 08-AUG-2002.

18-JAN-2001; 2001US-0076535.
 18-MAR-1991; 91US-00670827.
 18-MAR-1992; 92US-00853606.
 11-SEP-1992; 92US-00943852.
 29-JAN-1993; 93US-00010406.
 02-FEB-1993; 93US-00013413.
 04-FEB-1994; 94US-00192093.
 04-FEB-1994; 94US-00192861.
 18-OCT-1994; 94US-00324799.
 11-DEC-1995; 95US-00570674.
 12-AUG-1998; 98US-00133119.
 (CENZ) CENTOCOR INC.

Le J, Vilcek J, Daddona P, Ghayab J, Knight D, Siegel S;
 WPI; 2002-706216/76.
 N-PSDB; ABS54257.

Treating a neurodegenerative disease, especially multiple sclerosis,
 comprises administering an anti-tumor necrosis factor monoclonal antibody
 or its fragment.

Disclosure; Fig 16B; 95pp; English.

The present invention relates to anti-tumour necrosis factor (TNF)
 antibodies, and anti-TNF peptides, which are specific for human tumour
 necrosis factor-alpha (TNFalpha). Methods of producing and using the anti-
 TNF antibodies and anti-TNF peptides are also disclosed. The anti-TNF
 antibodies, anti-TNF peptides and methods of the invention are useful for
 treating human neurodegenerative diseases (e.g. multiple sclerosis,
 acquired immunodeficiency syndrome (AIDS) dementia complex, a
 demyelinating disease, acute transverse myelitis, an extrapyramidal
 disorder, a cerebellar disorder, a lesion of the corticospinal system, a
 disorder of the basal ganglia, a hyperkinetic movement disorder,
 Huntington's chorea, senile chorea, a drug-induced movement disorder, a
 hypokinetic movement disorder, Parkinson's disease, progressive
 supranuclear palsy, a structural lesion of the cerebellum, a
 spinocerebellar degeneration, spinal ataxia, Friedreich's ataxia, a
 cerebellar cortical degeneration, a multiple systems degeneration, a
 systemic disorder, Refsum's disease, abetalipoproteinaemia, ataxia
 telangiectasia, a mitochondrial multi-system disorder, demyelinating core
 disorder, acute transverse myelitis, a disorder of the motor unit, a
 neurogenic muscular atrophy, anterior horn cell degeneration, amyotrophic
 lateral sclerosis, infantile spinal muscular atrophy, juvenile spinal
 muscular atrophy, Alzheimer's disease, Down's Syndrome, a diffuse Lewy

body disease, senile dementia of Lewy body type, Wernicke-Korsakoff
 syndrome, chronic alcoholism, Creutzfeldt-Jakob disease, subacute
 sclerosing panencephalitis, Hallervorden-Spatz disease, or dementia
 pugilistica). The present sequence represents human-murine chimeric anti-
 human TNFalpha (hTNFalpha) chimeric A2 (CA2) heavy chain variable region.
 The CA2 monoclonal anti-TNF antibody consists of mouse (from female
 BALB/c mice) anti-human TNF IgG1 antibody (designated A2), and the
 constant regions of human IgG1 kappa

Sequence 119 AA;
 Query Match 100.0%; Score 636; DB 5; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSVAGSFIFSNHMMNWVRQSPKGLAEVAEIRSKINSAT 60
 DB 1 EVKLEESGGGLVQPGGSMKLSVAGSFIFSNHMMNWVRQSPKGLAEVAEIRSKINSAT 60
 QY 61 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTEDTGVYCSRNYGYSTYDWGGTTLTVS 119
 DB 61 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTEDTGVYCSRNYGYSTYDWGGTTLTVS 119

RESULT 8
 ABP54871
 ID ABP54871 standard; protein; 119 AA.
 XX
 AC ABP54871;
 XX
 DT 08-JAN-2003 (first entry)
 XX
 XX Murine anti-TNF antibody heavy chain variable region.
 XX
 XX Tumour necrosis factor; monoclonal antibody; chimeric antibody; antibody;
 KW myelodysplastic syndrome; cytostatic; vaccine.
 XX
 XX Mus musculus.
 XX
 XX US2002114805-A1.
 XX
 XX 22-AUG-2002.
 XX
 XX 07-DEC-2001; 2001US-00010229.
 XX
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00132093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.
 (UANY-) UNIV NEW YORK MEDICAL CENT.
 XX
 XX Le J, Vilcek J, Daddona P, Ghayab J, Knight D, Siegel S;
 PI
 XX WPI; 2002-740091/80.
 XX N-PSDB; ABV73815.
 XX
 XX Treating myelodysplastic syndrome in human, involves administering tumor
 PT necrosis factor-inhibiting amount of an anti-TNF antibody, monoclonal
 PT antibody CA2 or anti-TNF chimeric antibody.
 XX
 XX Claim 7; Page 56-57; 97pp; English.
 XX
 XX The present sequence is the protein sequence of the heavy chain variable

CC region (VH) of an anti-human tumour necrosis factor (TNF) monoclonal
 CC antibody (MAB) produced by murine hybridoma line A2. A claimed method of
 CC treating a myelodysplastic syndrome in a human comprises administering an
 CC anti-TNF chimeric antibody comprising the murine A2 VH and VL (see
 CC ABP54870) regions and an IgG1 human constant region. The anti-TNF
 CC peptides and antibodies of the invention can be used in the treatment of
 CC TNF-related pathologies such as acute and chronic immune and autoimmune
 CC pathologies, infections, inflammatory diseases, neurodegenerative
 CC diseases, malignant pathologies, and alcohol-induced hepatitis
 XX
 SQ Sequence 119 AA;
 Query Match 100.0%; Score 636; DB 5; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 EVKLEESGGGLVQPGGSKLSCVASFIFSNHNNWVRQSPKGLWVAEIRKSINSAT 60
 Db 1 EVKLEESGGGLVQPGGSKLSCVASFIFSNHNNWVRQSPKGLWVAEIRKSINSAT 60
 Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTDYWGQGTTLTVS 119
 Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTDYWGQGTTLTVS 119
 RESULT 9
 AAB47942
 ID AAB47942 standard; protein; 119 AA.
 XX
 AC AAB47942;
 XX
 DT 29-AUG-2003 (revised)
 DT 10-JUN-2002 (first entry)
 XX
 DE Chimeric antibody, CA2, VH.
 XX
 KW Human; tumour necrosis factor; TNF; chimeric; antibody; CA2; psoriasis;
 KW immunoglobulin; G1.
 XX
 OS Homo sapiens.
 OS Mus musculus.
 OS Chimeric.
 XX
 FN US2002022720-A1.
 XX
 PD 21-FEB-2002.
 XX
 PF 10-AUG-2001; 2001US-00927703.
 XX
 PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 XX
 PA (UNIV-) UNIV NEW YORK MEDICAL CENT.
 XX
 PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX WPI; 2002-255676/30.
 XX DR N-PSDB; AAI72610.
 XX
 XX Treating psoriasis in humans comprises administering anti-tumor necrosis
 XX factor (TNF) chimeric antibody CA2, or anti-TNF chimeric antibody which
 XX competitively inhibits binding of TNF to the antibody CA2.

BS Claim 7; Fig 16B; 97pp; English.
 XX
 CC The sequences given in AAB47941-42 show the light and heavy chain
 CC variable regions of the chimeric antibody, CA2. CA2 is an anti-tumour
 CC necrosis factor (TNF) antibody. Anti-human TNF chimeric antibodies, may
 CC be used for treating psoriasis in humans. Psoriasis may be treated by
 CC administering: (a) anti-TNF chimeric antibody (Ab) which competitively
 CC inhibits binding of TNF to monoclonal chimeric Ab CA2; or (b) anti-TNF
 CC chimeric Ab comprising a human immunoglobulin (Ig)G1 constant region and
 CC a non-human variable region, which binds to an epitope included in amino
 CC acids 87 - 108 or both 59 - 80 and 87 - 108 of a TNF sequence. The CA2
 CC antibody has potent TNF-inhibiting and/or neutralizing activity. Levels
 CC of CA2 as low as 125 ng/ml completely abolished the toxic activity of
 CC TNF. The CA2 exhibited greater TNF-inhibiting activity and/or
 CC neutralizing activity than did the parent murine A2 monoclonal antibody.
 CC (Updated on 29-AUG-2003 to standardise OS field)
 XX
 SQ Sequence 119 AA;
 Query Match 100.0%; Score 636; DB 5; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 EVKLEESGGGLVQPGGSKLSCVASFIFSNHNNWVRQSPKGLWVAEIRKSINSAT 60
 Db 1 EVKLEESGGGLVQPGGSKLSCVASFIFSNHNNWVRQSPKGLWVAEIRKSINSAT 60
 Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTDYWGQGTTLTVS 119
 Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTDYWGQGTTLTVS 119
 RESULT 10
 ABO09890
 ID ABO09890 standard; protein; 119 AA.
 XX
 AC ABO09890;
 XX
 DT 11-AUG-2003 (first entry)
 XX
 DE Mouse TNF-alpha antibody CA2 heavy chain variable region.
 XX
 KW Mouse; TNF-alpha; tumour necrosis factor-alpha; gene therapy; malignancy;
 KW TNF-alpha-mediated pathology; bacterial infection; viral infection;
 KW parasitic infection; chronic inflammatory disease; rheumatoid arthritis;
 KW systemic lupus erythematosus; Crohn's disease; ulcerative colitis;
 KW autoimmune disease; diabetes mellitus; Grave's disease; vascular disease;
 KW neurodegenerative disease; Alzheimer's disease; heavy chain; antibody.
 XX
 OS Mus sp.
 XX
 FN US2003017584-A1.
 XX
 PD 23-JAN-2003.
 XX
 PF 08-JAN-2001; 2001US-00756398.
 XX
 PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 XX
 PA (CENZ) CENTOCOR INC.
 XX
 XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX PI

DR WPI: 2003-401678/38.
 DR N-PSDB; ACA61153.
 XX
 PT New nucleic acid molecule for diagnosing or treating tumor necrosis
 PT factor alpha-mediated diseases, e.g. infections, chronic inflammatory
 PT diseases, autoimmune diseases, cancer or neurodegenerative diseases.
 XX
 XX Claim 4; Fig 16B; 100pp; English.
 XX
 CC The invention relates to an isolated nucleic acid molecule that encodes a
 CC tumour necrosis factor-alpha (TNF-alpha) specific antibody. The nucleic
 CC acid molecule is useful in diagnosing and/or treating TNF-alpha-mediated
 CC pathologies and conditions, such as bacterial, viral or parasitic
 CC infections, chronic inflammatory diseases (e.g. rheumatoid arthritis,
 CC Crohn's disease or ulcerative colitis), autoimmune diseases (e.g.
 CC systemic lupus erythematosus, diabetes mellitus or Grave's disease),
 CC malignancies, vascular diseases and/or neurodegenerative diseases (e.g.
 CC Alzheimer's disease) and in research purposes. The present sequence
 CC represents the amino acid sequence of the mouse TNF-alpha antibody cA2
 CC heavy chain variable region
 XX
 XX Sequence 119 AA;
 SQ
 Query Match 100.0%; Score 636; DB 6; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
 DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
 RESULT 11
 ABG72949
 ID ABG72949 standard; protein; 119 AA.
 XX
 AC ABG72949;
 XX
 DT 03-APR-2003 (first entry)
 XX
 DE Chimeric A2 (cA2) antibody heavy chain variable region.
 KW Tumour necrosis factor; TNF; antibacterial; immunosuppressive;
 KW tumour necrosis factor inhibitor; bacterial infection; cA2; sepsis;
 KW endothelial damage; vascular damage; severe hypotension;
 KW disseminated intravascular coagulation; shock; inflammation; bacteraemia;
 KW chimeric A2 antibody; cA2 heavy chain variable region.
 XX
 OS Synthetic.
 XX
 PN US2002141996-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 10-JAN-2002; 2002US-00043450.
 XX
 PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853506.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 PR 10-AUG-2001; 2001US-00927703.

XX (UANY-) UNIV NEW YORK MEDICAL CENT.
 PA (CENZ) CENTOCOR INC.
 XX
 PI Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
 XX
 DR WPI: 2003-174129/17.
 DR N-PSDB; ABX14787.
 XX
 PT Treating bacterial infection in a human comprises administering to the
 PT human a tumor necrosis factor (TNF)-inhibiting amount of an anti-TNF
 PT chimeric antibody, which competitively inhibits binding of TNF to
 PT monoclonal antibody cA2.
 XX
 PS Claim 11; Fig 16B; 97pp; English.
 XX
 CC The invention describes a method of treating bacterial infection in a
 CC human comprising administering to the human a tumour necrosis factor
 CC (TNF)-inhibiting amount of an anti-TNF chimeric antibody, which
 CC competitively inhibits binding of TNF to monoclonal antibody cA2. The
 CC methods are useful for treating bacterial infections, a pathology
 CC associated with a sepsis (e.g. endothelial damage, vascular damage,
 CC disseminated intravascular coagulation or severe hypotension), shock
 CC resulting from bacterial infection, or inflammatory reaction resulting
 CC from bacteraemia. The anti-TNF antibodies and peptides in the form of
 CC pharmaceutical and/or diagnostic compounds are useful for diagnosing and
 CC treating TNF-related pathologies. This is the amino acid sequence of the
 CC chimeric A2 (cA2) antibody heavy chain variable region
 XX
 XX Sequence 119 AA;
 SQ
 Query Match 100.0%; Score 636; DB 6; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
 DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
 RESULT 12
 ABG75767
 ID ABG75767 standard; protein; 119 AA.
 XX
 AC ABG75767;
 XX
 DT 29-APR-2003 (first entry)
 XX
 DE cA2 variable heavy chain of the TNFalpha antibody.
 XX
 KW Mouse; TNFalpha; humanised antibody; tumour necrosis factor-alpha;
 KW antigen; constant region; heavy chain; light chain;
 KW antigen binding region; complementarity determining region; CDR; A2; cA2;
 KW framework region; cytokine; TNF; pro-inflammatory; tissue injury;
 KW procoagulant; vascular endothelial cell; neutrophil; lymphocyte;
 KW platelet activating factor; macrophage; immune disorder; scleroderma;
 KW autoimmune disorder; rheumatoid arthritis; thyroidosis; diabetes;
 KW graft versus host disease; Grave's disease; infection; AIDS;
 KW inflammatory disease; sarcoidosis; chronic inflammatory bowel disease;
 KW ulcerative colitis; Crohn's disease; atherosclerosis; dementia;
 KW neurodegenerative disease; multiple sclerosis; Parkinson's disease;
 KW Alzheimer's disease; cancer; hepatitis; ocular neovascularisation;
 KW psoriasis; duodenal ulcer; angiogenesis; female reproductive tract;
 KW immunosuppressive; dermatological; anti-HIV; antiarteriosclerotic;
 KW neuroprotective; nootropic; cytostatic; gynecological.
 XX
 OS Mus musculus.
 XX
 PN US2002132307-A1.

XX 19-SEP-2002.
XX 08-JAN-2001; 2001US-00756161.
XX 12-AUG-1998; 98US-00133119.
XX (UNY) UNIV NEW YORK STATE.
XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2003-237899/23.
XX N-PSDB; ABX11350.
XX New humanized anti-TNF antibody with an antigen binding region, useful
XX for diagnosing and treating TNF-related pathologies, such as autoimmune
XX disorders, bacterial and viral infections, inflammatory diseases, AIDS
XX and cancer.
XX Claim 22; Fig 16B; 98pp; English.
XX The invention discloses a new humanised antibody, or its antigen-binding
XX fragment, that selectively binds human tumour necrosis factor- α (TNF α),
XX comprising an antigen binding region of non-human origin and
XX at least a portion of an antibody of human origin. The antibody consists
XX of a constant region heavy or light chain of human origin and an antigen
XX binding region, comprising complementarity determining regions (CDRs)
XX derived from an antibody of murine origin that binds to human TNF- α (A2 or cA2),
XX and a framework region derived from a heavy or light chain
XX of human origin. Also disclosed is an expression vector comprising a
XX fused gene encoding the humanised antibody, or its antigen-binding
XX fragment, and the method for preparing it. The cytokine TNF causes pro-
XX inflammatory actions which result in tissue injury, such as including
XX procoagulant activity on vascular endothelial cells, increasing the
XX adherence of neutrophils and lymphocytes and stimulating the release of
XX platelet activating factor from macrophages, neutrophils and vascular
XX endothelial cells. The methods are useful for preparing a humanised
XX antibody, and antigen-binding fragment, and manufacturing a polypeptide.
XX The methods and compositions are also useful for the diagnosis and
XX treatment of TNF-related pathologies, such as acute and chronic immune
XX and autoimmune disorders (rheumatoid arthritis, thyroiditis, graft versus
XX host disease, scleroderma, diabetes and Grave's disease), bacterial and
XX viral infections including AIDS, inflammatory diseases (sarcoidosis,
XX chronic inflammatory bowel disease, ulcerative colitis, Crohn's disease
XX and atherosclerosis), neurodegenerative diseases (multiple sclerosis,
XX Parkinson's disease, dementia and Alzheimer's disease), cancer,
XX hepatitis, ocular neovascularisation, psoriasis, duodenal ulcers and
XX angiogenesis of the female reproductive tract. The sequence presented is
XX the murine cA2 variable heavy chain of the TNF α antibody
XX
XX Sequence 119 AA;
Query Match 100.0%; Score 636; DB 6; Length 119;
Best Local Similarity 100.0%; Pred. NO. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EVKLESGGGLVQPGGSKLSCVASGPFNSHNHNNVWQSPKGLWVAEIRKSNAT 60
Db 1 EVKLESGGGLVQPGGSKLSCVASGPFNSHNHNNVWQSPKGLWVAEIRKSNAT 60
Qy 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDGVVYCSNYYGSDYVWGQTTITVS 119
Db 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDGVVYCSNYYGSDYVWGQTTITVS 119
RESULT 13
ABG75774
ID ABG75774 standard; protein; 119 AA.
XX AC ABG75774;
XX DT 29-APR-2003 (first entry)
XX

DE XX cA2 variable heavy chain of the TNF α antibody.
KW Mouse; tumour necrosis factor α , TNF α ; rheumatoid arthritis;
KW TNF inhibitor; ankylosis; anti-TNF antibody; cA2; immunoglobulin G1;
KW Ig G1; TNF; heavy chain; light chain; antigen binding; CDR;
KW complementarity determining region; framework region; cytokine;
KW pro-inflammatory; tissue injury; procoagulant; vascular endothelial cell;
KW neutrophil; lymphocyte; platelet activating factor; macrophage;
KW immune disorder; autoimmune disorder; rheumatoid arthritis; thyroiditis;
KW graft versus host disease; scleroderma; diabetes; Grave's disease;
KW infection; AIDS; inflammatory disease; sarcooidosis;
KW chronic inflammatory bowel disease; ulcerative colitis; Crohn's disease;
KW atherosclerosis; neurodegenerative disease; multiple sclerosis;
KW Parkinson's disease; dementia Alzheimer's disease; cancer; hepatitis;
KW ocular neovascularisation; psoriasis; duodenal ulcer; angiogenesis;
KW female reproductive tract; haemodynamic; febrile; allergic episode.
XX Mus musculus.
XX US2002146419-A1.
XX 10-OCT-2002.
XX 10-JAN-2002; 2002US-00044534.
XX 18-MAR-1991; 91US-00670827.
XX 18-MAR-1992; 92US-00853606.
XX 11-SEP-1992; 92US-00943852.
XX 29-JAN-1993; 93US-00010406.
XX 02-FEB-1993; 93US-00013413.
XX 04-FEB-1994; 94US-00192093.
XX 04-FEB-1994; 94US-00192102.
XX 04-FEB-1994; 94US-00192861.
XX 18-OCT-1994; 94US-00324799.
XX 11-DEC-1995; 95US-00570674.
XX 12-AUG-1998; 98US-00133119.
XX 08-JAN-2001; 2001US-00756398.
XX 10-AUG-2001; 2001US-00927703.
XX (UNY-) UNIV NEW YORK MEDICAL CENT.
XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2003-255124/25.
XX N-PSDB; ABX11366.
XX Treating ankylosis in a human, comprises administering a tumor necrosis
XX factor (TNF)-inhibiting amount of anti-TNF chimeric antibody.
XX Claim 7; Fig 16B; 97pp; English.
XX The invention discloses a method for treating ankylosis, by administering
XX a tumour necrosis factor (TNF)-inhibiting anti-TNF chimeric antibody
XX which competitively inhibits binding of TNF to the murine monoclonal
XX antibody cA2, where the antibody comprises an immunoglobulin (Ig) G1
XX constant region and binds to an epitope of human TNF. The antibody
XX consists of a constant region heavy or light chain of human origin and an
XX antigen binding region, comprising complementarity determining regions
XX (CDRs) derived from an antibody of murine origin that binds to human
XX TNF α (A2 or cA2), and a framework region derived from a heavy or
XX light chain of human origin. The cytokine TNF causes pro-inflammatory
XX actions which result in tissue injury, such as inducing procoagulant
XX activity on vascular endothelial cells, increasing the adherence of
XX neutrophils and lymphocytes and stimulating the release of platelet
XX activating factor from macrophages, neutrophils and vascular endothelial
XX cells. The methods and compositions are also useful for the diagnosis and
XX treatment of ankylosis and TNF-related pathologies, such as acute and
XX chronic immune and autoimmune disorders (rheumatoid arthritis,
XX thyroiditis, graft versus host disease, scleroderma, diabetes and Grave's
XX disease), bacterial and viral infections including AIDS, inflammatory
XX diseases (sarcoidosis, chronic inflammatory bowel disease, ulcerative
XX colitis, Crohn's disease and atherosclerosis), neurodegenerative diseases
XX (multiple sclerosis, Parkinson's disease, dementia and Alzheimer's

CC disease), cancer, hepatitis, ocular neovascularisation, psoriasis,
 CC duodenal ulcers and angiogenesis of the female reproductive tract. The
 CC chimeric anti-TNF MAb was well-tolerated and involved no haemodynamic,
 CC febrile or allergic episodes. The sequence presented is the murine cA2
 CC variable heavy chain of the TNFalpha antibody
 XX Sequence 119 AA;
 SQ Query Match 100.0%; Score 636; DB 6; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTWS 119
 Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTWS 119
 RESULT 14
 ID ABU63588
 XX ABU63588 standard; protein; 119 AA.
 AC ABU63588;
 XX
 DT 06-NOV-2003 (first entry)
 XX
 DE Mouse cA2 heavy chain variable region.
 XX
 KW Mouse; tumour necrosis factor alpha; TNF alpha; immunomodulator;
 KW TNF-Antagonist; cachexia; cancer; HIV; AIDS;
 KW cA2 heavy chain variable region.
 XX
 OS Mus sp.
 XX
 PN US2003054004-A1.
 XX
 PD 20-MAR-2003.
 XX
 PF 10-JAN-2002; 2002US-00043432.
 XX
 PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00131119.
 PR 10-AUG-2001; 2001US-00927703.
 XX
 PA (UUNY-) UNIV NEW YORK MEDICAL CENT.
 XX
 PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX
 DR WPI; 2003-558374/52.
 DR N-PSDB; ACD28372.
 XX
 PT Treating cachexia, particularly a cachexia associated with cancer, HIV or
 PT AIDS comprising administering a tumor necrosis factor (TNF)-inhibiting
 PT amount of human-murine anti-TNF chimeric antibodies.
 XX
 PS Claim 7; Fig 16B; 97pp; English.
 CC
 CC The invention describes a method of treating cachexia in a human
 CC comprising administering a tumour necrosis factor (TNF)-inhibiting amount
 CC of: (a) an anti-TNF chimeric antibody, which competitively inhibits

CC binding of TNF to monoclonal antibody (mAb) cA2; (b) chimeric anti-TNF
 CC antibody cA2; (c) at least one mAb cA2, or its TNF-binding fragment; or
 CC (d) an anti-TNF chimeric antibody with epitopic specificity identical to
 CC mAb cA2. Administering a TNF-inhibiting amount of an anti-TNF chimeric
 CC antibody which has epitopic specificity identical to mAb cA2 is useful
 CC for treating cachexia in humans, particularly a cachexia associated with
 CC cancer, HIV or AIDS. This is the amino acid sequence of mouse cA2 heavy
 CC chain variable region used in the creation of TNF alpha-antibody fusion
 CC proteins
 XX Sequence 119 AA;
 SQ Query Match 100.0%; Score 636; DB 6; Length 119;
 Best Local Similarity 100.0%; Pred. No. 1.3e-49;
 Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRSPEKGLWVAEIRSKINSAT 60
 QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTWS 119
 Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTWS 119
 RESULT 15
 ID ADC46572
 XX ADC46572 standard; protein; 119 AA.
 AC ADC46572;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Mouse cA2 antibody heavy chain variable region polypeptide.
 XX
 KW Mouse; tumour necrosis factor-alpha; TNF-alpha; A2; cA2;
 KW complementarity determining region; bacterial infection; viral infection;
 KW fungal infection; parasitic infection; inflammatory disease; sarcoidosis;
 KW atherosclerosis; autoimmune disease; rheumatoid arthritis;
 KW systemic lupus erythematosus; neurodegenerative disease;
 KW Huntington's Chorea; Parkinson's disease; malignancy; lymphoma;
 KW carcinoma; alcohol-induced hepatitis; heavy chain variable region;
 KW antibody.
 XX
 OS Mus sp.
 XX
 PN US2003144484-A1.
 XX
 PD 31-JUL-2003.
 XX
 PF 18-JUL-2002; 2002US-00198845.
 XX
 PR 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00131119.
 PR 08-JAN-2001; 2001US-00756398.
 XX
 PA (UUNY) UNIV NEW YORK STATE.
 XX
 PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 XX
 DR WPI; 2003-744929/70.
 DR N-PSDB; ADC46571.
 XX
 PT New human anti-tumor necrosis factor (TNF) antibody or its antigen

PT binding fragment that competitively inhibits binding of A2 or CA2 to
PT human TNF-alpha, useful for diagnosing and treating TNF-alpha-mediated
PT diseases, e.g. infection.
XX
XX Disclosure; SEQ ID NO 5; 97pp; English.
XX
CC The invention relates to a human anti-tumour necrosis factor (TNF)
CC antibody or its antigen binding fragment that competitively inhibits
CC binding of antibodies A2 or CA2 to human TNF-alpha. The invention also
CC relates to a composition comprising the antibody or its antigen binding
CC fragment and a carrier, a human light or heavy chain that specifically
CC binds human TNF-alpha and competitively inhibits binding of A2 or CA2 to
CC human TNF-alpha, the human light or heavy chain consisting of the
CC complementarity determining regions of the light or heavy chain of A2 or
CC CA2, and a human light or heavy chain framework region and an isolated
CC nucleic acid that encodes the above human heavy or light chain. The
CC antibody is useful in in vivo diagnosis and therapy of TNF-alpha-mediated
CC pathologies and conditions, such as infections (e.g. bacterial, viral,
CC fungal or parasitic), inflammatory diseases (e.g. sarcoidosis,
CC atherosclerosis), autoimmune diseases (e.g. rheumatoid arthritis,
CC systemic lupus erythematosus), neurodegenerative diseases (e.g.
CC Huntington's Chorea, Parkinson's disease), malignancies (e.g. lymphomas,
CC carcinomas) and alcohol-induced hepatitis. This sequence represents the
CC mouse CA2 antibody heavy chain variable region polypeptide.
XX
SQ Sequence 119 AA;
Query Match 100.0%; Score 636; DB 7; Length 119;
Best Local Similarity 100.0%; Pred. No. 1.3e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EVKLESGGGVQPGGSKLSCVASGFIFSNHNNWVYRQSPKGLWVAIRSKINSAT 60
Db 1 EVKLESGGGVQPGGSKLSCVASGFIFSNHNNWVYRQSPKGLWVAIRSKINSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDGTGVYCSRNYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDGTGVYCSRNYGSTDYWGQGTTLTVS 119

Search completed: December 15, 2004, 17:16:39
Job time : 119.947 secs


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; REFERENCE/DOCKET NUMBER: NYU93-01M3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 119 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-192-102-5

Query Match          100.0%; Score 636; DB 1; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSCVASGIFSNHNMWVVRQSPKGLWVAIRSKSINSAT 60
Db 1 EVKLEESGGGLVQPGGSMKLSCVASGIFSNHNMWVVRQSPKGLWVAIRSKSINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDGVVYCSRNYYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDGVVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 2
US-08-324-799-5
; Sequence 5, Application US/08324799
; Patent No. 5698195
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Wilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Daddona, John
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND PEPTIDES
; TITLE OF INVENTION: OF HUMAN TUMOR NECROSIS FACTOR
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/324,799
; FILING DATE: 18-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,093
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,102
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,861
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:

```

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; APPLICATION NUMBER: US 07/853,606
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 119 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-324-799-5

Query Match          100.0%; Score 636; DB 1; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSCVASGIFSNHNMWVVRQSPKGLWVAIRSKSINSAT 60
Db 1 EVKLEESGGGLVQPGGSMKLSCVASGIFSNHNMWVVRQSPKGLWVAIRSKSINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDGVVYCSRNYYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDGVVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 3
US-08-192-861A-5
; Sequence 5, Application US/08192861A
; Patent No. 5919452
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Wilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: METHODS OF TREATING TNF-MEDIATED DISEASE USING
; TITLE OF INVENTION: CHIMERIC ANTI-TNF ANTIBODIES (As Amended)
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/192,861A
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,606

```

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; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781) 861-6240
; TELEFAX: (781) 861-9540
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 119 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-192-861A-5

Query Match 100.0%; Score 636; DB 2; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSCVASGFIFSNHNMWVRQSPKGLWVAEIRSKINSAT 60
Db 1 EVKLEESGGGLVQPGGSMKLSCVASGFIFSNHNMWVRQSPKGLWVAEIRSKINSAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119

RESULT 4
US-09-133-119-5
; Sequence 5, Application US/09133119
; Patent No. 6277969
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND PEPTIDES
; TITLE OF INVENTION: OF HUMAN TUMOR NECROSIS FACTOR
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/133,119
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/570,674
; FILING DATE: 11-DEC-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/324,799
; FILING DATE: 18-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,093
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,102
; FILING DATE: 04-FEB-1994
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/192,861
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,606
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M4A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 119 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-133-119-5

Query Match 100.0%; Score 636; DB 3; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSCVASGFIFSNHNMWVRQSPKGLWVAEIRSKINSAT 60
Db 1 EVKLEESGGGLVQPGGSMKLSCVASGFIFSNHNMWVRQSPKGLWVAEIRSKINSAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119

RESULT 5
US-08-192-093A-5
; Sequence 5, Application US/08192093A
; Patent No. 6284471
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter E.
; APPLICANT: Ghayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott A.
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES AND ASSAYS EMPLOYING
; TITLE OF INVENTION: ANTI-TNF ANTIBODIES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
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; APPLICATION NUMBER: US/08/192,093A
; FILING DATE: 04-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/013,413
; FILING DATE: 02-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/010,406
; FILING DATE: 29-JAN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/943,852
; FILING DATE: 11-SEP-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,606
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/670,827
; FILING DATE: 18-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Brook, David E.
; REGISTRATION NUMBER: 22,592
; REFERENCE/DOCKET NUMBER: NYU93-01M3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 119 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-192-093A-5

Query Match          100.0%; Score 636; DB 3; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSVAVLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 60
DB 1 EVKLEESGGGLVQPGGSMKLSVAVLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 6
US-09-756-301B-5
; Sequence 5, Application US/09756301B
; Patent No. 6790444
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Graybe, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; TITLE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-008
; CURRENT APPLICATION NUMBER: US/09/756,301B
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
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; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
; US-09-756-301B-5

Query Match          100.0%; Score 636; DB 4; Length 119;
Best Local Similarity 100.0%; Pred. No. 2.4e-55;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSMKLSVAVLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 60
DB 1 EVKLEESGGGLVQPGGSMKLSVAVLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 7
US-08-483-749A-2
; Sequence 2, Application US/08483749A
; Patent No. 6054561
; GENERAL INFORMATION:
; APPLICANT: RING, DAVID B.
; TITLE OF INVENTION: ANTIGEN-BINDING SITES OF ANTIBODY
; TITLE OF INVENTION: MOLECULES SPECIFIC FOR CANCER ANTIGENS
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CHIRON CORPORATION
; STREET: INTELLECTUAL PROPERTY - R440, PO BOX 8097
; CITY: EMERYVILLE
; STATE: CA
; COUNTRY: USA
; ZIP: 94662-8097
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/483,749A
; APPLICATION NUMBER: US/08/483,749A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: SAVERIDE, PAUL B.
; REGISTRATION NUMBER: 36,914
; REFERENCE/DOCKET NUMBER: 0508.008
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (510) 601-2585
; TELEFAX: (510) 655-3542
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 122 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-483-749A-2

Query Match          81.6%; Score 519; DB 3; Length 122;
Best Local Similarity 81.3%; Pred. No. 8e-44;
Matches 100; Conservative 8; Mismatches 9; Indels 6; Gaps 2;
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GENERAL INFORMATION:
APPLICANT: WYLIE, DWANE E.
APPLICANT: LOPEZ, OSVALDO
APPLICANT: MURRAY, PETER JOSEPH
APPLICANT: GOEBEL, PETER
TITLE OF INVENTION: LEAD BINDING POLYPEPTIDES AND
TITLE OF INVENTION: NUCLEOTIDES CODING THEREFORE
NUMBER OF SEQUENCES: 46
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
STREET: 3100 No. 611079west Center, 90 South Seventh St
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/767,128
FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/09258
FILING DATE: 05-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/541,373
FILING DATE: 10-OCT-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/462,798
FILING DATE: 05-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Carter, Charles G.
REGISTRATION NUMBER: 35,093
REFERENCE/DOCKET NUMBER: 8648.49USF1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612/371-5278
TELEFAX: 612/332-9081
TELEX:
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
US-08-767-128-26

Query Match 79.3%; Score 504.5; DB 3; Length 119;
Best Local Similarity 81.5%; Pred. No. 2.1e-42;
Matches 97; Conservative 7; Mismatches 14; Indels 1; Gaps 1;
QY 1 EVKLEESGGGLVQPGGSKLSCVASGFTFSNNHNNWVRQSPKGLWVAEIRKSNAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFTFSNNHNNWVRQSPKGLWVAEIRKSNAT 59
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGYYCSRNYYGSTDYWGQGTTLTVS 119
DB 60 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGYYCSRNYYGSTDYWGQGTTLTVS 118
RESULT 11
US-08-224-591-14

Sequence 14, Application US/08224591
Patent No. 5856456
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Filpula, David
TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
STREET: 1100 New York Avenue, Suite 600
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/224,591
FILING DATE: Herewith
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/002,845
FILING DATE: 15-JAN-1993
APPLICATION NUMBER: US 07/980,529
FILING DATE: 20-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.1920002/JAG
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 242 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-224-591-14
Query Match 76.6%; Score 487; DB 2; Length 242;
Best Local Similarity 74.8%; Pred. No. 2.5e-40;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;
QY 1 EVKLEESGGGLVQPGGSKLSCVASGFTFSNNHNNWVRQSPKGLWVAEIRKSNAT 60
DB 126 EVKLEESGGGLVQPGGSKLSCVASGFTFSNNHNNWVRQSPKGLWVAEIRKSNAT 185
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGYYCSRNYYGSTDYWGQGTTLTVS 119
DB 186 YVSDSVKGRFTISRDDSKSAVYLQMTDLRTDTGYYCSRNYYGSTDYWGQGTTLTVS 242
RESULT 12
US-08-392-338A-23
Sequence 23, Application US/08392338A
Patent No. 5869620
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
APPLICANT: Wood, James F.
APPLICANT: Hardman, Karl
APPLICANT: Bird, Robert
APPLICANT: Filpula, David
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.

/ COUNTRY: U.S.A.
/ ZIP: 20005
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/392,338A
/ FILING DATE: 22-FEB-1995
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/989,846
/ FILING DATE: 20-NOV-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/796,936
/ FILING DATE: 25-NOV-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Goldstein, Jorge A.
/ REGISTRATION NUMBER: 29,021
/ REFERENCE/DOCKET NUMBER: 0977.0030007
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 371-2600
/ TELEFAX: (202) 371-2540
/ INFORMATION FOR SEQ ID NO: 23:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 242 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-392-338A-23

Query Match 76.6%; Score 487; DB 2; Length 242;

Best Local Similarity 74.8%; Pred. No. 2.5e-40;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGTFPSNHNWVWVRSQPEKLEWVAIRSKINSAT 60
DB 126 EVKLEETGGGLVQPGRPKMLSCVASGTFPSDYNWVWVRSQPEKLEWVAIRKPNYET 185
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTYDYGQGTTLTVS 119
DB 186 YYSDSVKGRTISRDDSKSSVYLQMNLRVEDMGIIYCTGSYG--MDYWGQGTSTVTS 242

RESULT 13

US-08-926-789-14
/ Sequence 14, Application US/08926789
/ Patent No. 5990275
/ GENERAL INFORMATION:
/ APPLICANT: Whitlow, Marc
/ APPLICANT: Filpula, David
/ TITLE OF INVENTION: Linker For Linked Fusion Polypeptides
/ NUMBER OF SEQUENCES: 25
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Sterne, Kessler, Goldstein & Fox
/ STREET: 1100 New York Avenue, Suite 600
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: U.S.A.
/ ZIP: 20005
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/926,789
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/224,591
/ FILING DATE:

/ APPLICATION NUMBER: US 08/002,845
/ FILING DATE: 15-JAN-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/980,529
/ FILING DATE: 20-NOV-1992
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Goldstein, Jorge A.
/ REGISTRATION NUMBER: 29,021
/ REFERENCE/DOCKET NUMBER: 0977.1920002/JAG
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 371-2600
/ TELEFAX: (202) 371-2540
/ INFORMATION FOR SEQ ID NO: 14:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 242 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-926-789-14

Query Match 76.6%; Score 487; DB 2; Length 242;

Best Local Similarity 74.8%; Pred. No. 2.5e-40;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGTFPSNHNWVWVRSQPEKLEWVAIRSKINSAT 60
DB 126 EVKLEETGGGLVQPGRPKMLSCVASGTFPSDYNWVWVRSQPEKLEWVAIRKPNYET 185
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTYDYGQGTTLTVS 119
DB 186 YYSDSVKGRTISRDDSKSSVYLQMNLRVEDMGIIYCTGSYG--MDYWGQGTSTVTS 242

RESULT 14

US-09-166-750-23
/ Sequence 23, Application US/09166750
/ Patent No. 6025165
/ GENERAL INFORMATION:
/ APPLICANT: Whitlow, Marc
/ APPLICANT: Wood, James F.
/ APPLICANT: Hardman, Karl
/ APPLICANT: Bird, Robert
/ APPLICANT: Filpula, David
/ APPLICANT: Rollence, Michelle
/ TITLE OF INVENTION: Methods for Producing Multivalent Antigen-Binding
/ NUMBER OF SEQUENCES: 23
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
/ STREET: 1100 New York Avenue, NW
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: U.S.A.
/ ZIP: 20005
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/166,750
/ FILING DATE: Herewith
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/392,338
/ FILING DATE: 22-FEB-1995
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/989,846
/ FILING DATE: 20-NOV-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/796,936
/ FILING DATE: 25-NOV-1991
/ ATTORNEY/AGENT INFORMATION:

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; NAME: Goldstein, Jorge A.
; REGISTRATION NUMBER: 29,021
; REFERENCE/DOCKET NUMBER: 0977.003000C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 242 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-166-750-23

Query Match 76.6%; Score 487; DB 3; Length 242;
Best Local Similarity 74.8%; Pred. No. 2.5e-40;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSMKLSVAGSFIFSNHMMWVRQSPKGLWVAEIRKSKINSAT 60
DB 126 EVKLDGTGGGLVQPGRPMLKSCVAGSFTSDYNNWVRQSPKGLWVAQIRNKPNYET 185
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTYDYGQGTTLTVS 119
DB 186 YYSDSVKGRTISRDDSKSSVYLQNNLRVEDMGIIYCTGSYYG--MDYWGQGTSTVTS 242

RESULT 15
US-09-166-093-23
; Sequence 23, Application US/09166093
; Patent No. 6027725
; GENERAL INFORMATION:
; APPLICANT: Whitlow, Marc
; APPLICANT: Wood, James F.
; APPLICANT: Hardman, Karl
; APPLICANT: Bird, Robert
; APPLICANT: Filpula, David
; APPLICANT: Rollence, Michelle
; TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
; STREET: 1100 New York Avenue, NW
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/09166,093
; FILING DATE: Herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/392,338
; FILING DATE: 22-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/989,846
; FILING DATE: 20-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/796,936
; FILING DATE: 25-NOV-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Goldstein, Jorge A.
; REGISTRATION NUMBER: 29,021
; REFERENCE/DOCKET NUMBER: 0977.003000B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 23:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 242 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-166-093-23

Query Match 76.6%; Score 487; DB 3; Length 242;
Best Local Similarity 74.8%; Pred. No. 2.5e-40;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSMKLSVAGSFIFSNHMMWVRQSPKGLWVAEIRKSKINSAT 60
DB 126 EVKLDGTGGGLVQPGRPMLKSCVAGSFTSDYNNWVRQSPKGLWVAQIRNKPNYET 185
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGVIYCSRNYYGSTYDYGQGTTLTVS 119
DB 186 YYSDSVKGRTISRDDSKSSVYLQNNLRVEDMGIIYCTGSYYG--MDYWGQGTSTVTS 242

Search completed: December 15, 2004, 17:22:51
Job time : 31.5398 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 15, 2004, 17:21:06 ; Search time 101.624 Seconds
(without alignments)
418.250 Million cell updates/sec

Title: US-09-897-724-5
Perfect score: 636
Sequence: 1 EVKLESGGLVPGGSMKL.....RNYGYSTYDWGGITLTIVS 119

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1585576 seqs, 357178320 residues

Total number of hits satisfying chosen parameters: 1585576

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
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11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
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| 1 | 636 | 100.0 | 119 | 9 | US-09-756-301A-5 |
| 2 | 636 | 100.0 | 119 | 9 | US-09-927-703-5 |
| 3 | 636 | 100.0 | 119 | 9 | US-09-766-535A-5 |
| 4 | 636 | 100.0 | 119 | 9 | US-09-756-161A-5 |
| 5 | 636 | 100.0 | 119 | 10 | US-09-756-398B-5 |
| 6 | 636 | 100.0 | 119 | 10 | US-09-857-724-5 |
| 7 | 636 | 100.0 | 119 | 13 | US-10-010-229-5 |
| 8 | 636 | 100.0 | 119 | 13 | US-10-043-450-5 |
| 9 | 636 | 100.0 | 119 | 13 | US-10-044-534-5 |
| 10 | 636 | 100.0 | 119 | 14 | US-10-043-432-5 |
| 11 | 636 | 100.0 | 119 | 14 | US-10-208-145-5 |
| 12 | 636 | 100.0 | 119 | 14 | US-10-198-845-5 |
| 13 | 636 | 100.0 | 119 | 14 | US-10-227-488-5 |

| | | | | | |
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| 14 | 636 | 100.0 | 119 | 14 | US-10-187-121-5 |
| 15 | 636 | 100.0 | 119 | 14 | US-10-176-460-5 |
| 16 | 636 | 100.0 | 119 | 14 | US-10-186-559-5 |
| 17 | 636 | 100.0 | 119 | 14 | US-10-371-961-5 |
| 18 | 636 | 100.0 | 119 | 14 | US-10-200-795-5 |
| 19 | 636 | 100.0 | 119 | 14 | US-10-319-011-5 |
| 20 | 636 | 100.0 | 119 | 14 | US-10-371-443-5 |
| 21 | 636 | 100.0 | 119 | 14 | US-10-379-866-5 |
| 22 | 636 | 100.0 | 119 | 14 | US-10-371-962-5 |
| 23 | 636 | 100.0 | 119 | 14 | US-10-384-060-29 |
| 24 | 636 | 100.0 | 119 | 16 | US-10-665-971-5 |
| 25 | 636 | 100.0 | 119 | 16 | US-10-637-759-5 |
| 26 | 636 | 100.0 | 119 | 16 | US-10-774-118-5 |
| 27 | 636 | 100.0 | 226 | 15 | US-10-411-037-42 |
| 28 | 636 | 100.0 | 226 | 15 | US-10-411-026-42 |
| 29 | 636 | 100.0 | 226 | 15 | US-10-410-362-42 |
| 30 | 636 | 100.0 | 226 | 15 | US-10-411-049-42 |
| 31 | 636 | 100.0 | 226 | 16 | US-10-410-930-42 |
| 32 | 636 | 100.0 | 226 | 16 | US-10-410-997-42 |
| 33 | 636 | 100.0 | 226 | 16 | US-10-411-012-42 |
| 34 | 636 | 100.0 | 226 | 16 | US-10-287-994-42 |
| 35 | 636 | 100.0 | 226 | 16 | US-10-410-313-42 |
| 36 | 636 | 100.0 | 240 | 14 | US-10-384-060-27 |
| 37 | 550 | 86.5 | 120 | 16 | US-10-338-552-3 |
| 38 | 550 | 86.5 | 120 | 16 | US-10-338-627-3 |
| 39 | 545 | 85.7 | 120 | 16 | US-10-338-552-7 |
| 40 | 545 | 85.7 | 120 | 16 | US-10-338-627-7 |
| 41 | 529 | 83.2 | 256 | 15 | US-10-239-856-61 |
| 42 | 529 | 83.2 | 503 | 15 | US-10-239-856-77 |
| 43 | 522.5 | 82.2 | 123 | 14 | US-10-160-506-69 |
| 44 | 522.5 | 82.2 | 123 | 16 | US-10-449-379-69 |
| 45 | 522.5 | 82.2 | 123 | 16 | US-10-688-015-69 |

ALIGNMENTS

RESULT 1
US-09-756-301A-5
; Sequence 5, Application US/09756301A
; Patent No. US20010027249A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Chrayevb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: Human Tumor Necrosis Factor
; CURRENT APPLICATION NUMBER: US/09756,301A
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18

; PRIOR APPLICATION NUMBER: U.S.07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-756-301A-5

Query Match 100.0%; Score 636; DB 9; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
QY 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 2

US-09-927-703-5
; Sequence 5, Application US/09927703
; Patent No. US2002022720A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junning
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/09/927,703
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-927-703-5

Query Match 100.0%; Score 636; DB 9; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
QY 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 3

US-09-766-535A-5
; Sequence 5, Application US/09766535A
; Patent No. US20020106372A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junning
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-010
; CURRENT APPLICATION NUMBER: US/09/766,535A
; CURRENT FILING DATE: 2001-01-18
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-766-535A-5

Query Match 100.0%; Score 636; DB 9; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIHSNHNWVRQSPKGLVWVAIRKSKINSAT 60
QY 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRFTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 4

US-09-756-161A-5
; Sequence 5, Application US/09756161A

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; Patent No. US20020132307A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-007
; CURRENT APPLICATION NUMBER: US/09/756,161A
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
; US-09-756-161A-5

Query Match          100.0%; Score 636; DB 9; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||
Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||

QY 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
    |||||
Db 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
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RESULT 5
US-09-756-398B-5
; Sequence 5, Application US/09756398B
; Publication No. US20030017584A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-006
; CURRENT APPLICATION NUMBER: US/09/756,398B
; CURRENT FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119

Query Match          100.0%; Score 636; DB 9; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||
Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||

QY 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
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Db 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
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RESULT 6
US-09-897-724-5
; Sequence 5, Application US/09897724
; Publication No. US20030175837A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-012
; CURRENT APPLICATION NUMBER: US/09/897,724
; CURRENT FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
; US-09-756-398B-5

Query Match          100.0%; Score 636; DB 10; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||
Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAIRSKINSAT 60
    |||||

QY 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
    |||||
Db 61 HYAESVKGRTISRDDSKSAVYLOMTDLRTEDTGYYCSNYYGSTDYWGQGTTLTVS 119
    |||||

RESULT 6
US-09-897-724-5
; Sequence 5, Application US/09897724
; Publication No. US20030175837A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-012
; CURRENT APPLICATION NUMBER: US/09/897,724
; CURRENT FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
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; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-09-897-724-5

Query Match      100.0%; Score 636; DB 10; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 7
US-10-010-229-5
; Sequence 5, Application US/10010229
; Publication No. US20020114805A1
; GENERAL INFORMATION:
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/010,229
; PRIOR FILING DATE: 2001-12-07
; PRIOR APPLICATION NUMBER: US/09/927,703
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-010-229-5

Query Match      100.0%; Score 636; DB 13; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 8
US-10-043-450-5
; Sequence 5, Application US/10043450
; Publication No. US20020141996A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/043,450
; PRIOR FILING DATE: 2002-01-10
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; PRIOR APPLICATION NUMBER: 09/927,703
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-043-450-5

Query Match      100.0%; Score 636; DB 13; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIFFSNHNNWVRQSPKGLWVAIRSKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 9
US-10-044-534-5
; Sequence 5, Application US/10044534
; Publication No. US20020146419A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE REFERENCE: 0975.1005-013
; CURRENT APPLICATION NUMBER: US/10/044,534
; CURRENT FILING DATE: 2002-01-10
; PRIOR APPLICATION NUMBER: 09/927,703
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
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; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-187-121-5

Query Match          100.0%; Score 636; DB 14; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAEIRSKSINSAT 60
Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAEIRSKSINSAT 60
QY 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119

RESULT 15
US-10-176-460-5
; Sequence 5, Application US/10176460
; Publication No. US20030176678A1
; GENERAL INFORMATION:
; APPLICANT: Le, Junming
; APPLICANT: Vilcek, Jan
; APPLICANT: Daddona, Peter
; APPLICANT: Grayeb, John
; APPLICANT: Knight, David M.
; APPLICANT: Siegel, Scott
; TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
; FILE OF INVENTION: Human Tumor Necrosis Factor
; FILE REFERENCE: 0975.1005-006
; CURRENT APPLICATION NUMBER: US/10/176,460
; CURRENT FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: US/09/756,398
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: U.S. 09/133,119
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: U.S. 08/570,674
; PRIOR FILING DATE: 1995-12-11
; PRIOR APPLICATION NUMBER: U.S. 08/324,799
; PRIOR FILING DATE: 1994-10-18
; PRIOR APPLICATION NUMBER: U.S. 08/192,102
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,861
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; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/192,093
; PRIOR FILING DATE: 1994-02-04
; PRIOR APPLICATION NUMBER: U.S. 08/010,406
; PRIOR FILING DATE: 1993-01-29
; PRIOR APPLICATION NUMBER: U.S. 08/013,413
; PRIOR FILING DATE: 1993-02-02
; PRIOR APPLICATION NUMBER: U.S. 07/943,852
; PRIOR FILING DATE: 1992-09-11
; PRIOR APPLICATION NUMBER: U.S. 07/853,606
; PRIOR FILING DATE: 1992-03-18
; PRIOR APPLICATION NUMBER: U.S. 07/670,827
; PRIOR FILING DATE: 1991-03-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Mus Balb/c
US-10-176-460-5

Query Match          100.0%; Score 636; DB 14; Length 119;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 119; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAEIRSKSINSAT 60
Db 1 EVKLEESGGGLVQPGGSKMLSCVASGFIFSNHNNWVRQSPKGLWVAEIRSKSINSAT 60
QY 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119

Search completed: December 15, 2004, 17:37:56
Job time : 101.624 secs
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is Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 15, 2004, 17:09:55 ; Search time 24.7478 Seconds
(without alignments)
462.659 Million cell updates/sec

Title: US-09-897-724-5
Perfect score: 636
Sequence: 1 EVKLESGGGLVOPGSGMKL.....RNYVGSYDYWGQGITLTVS 119

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79.*

- 1: Pirl.*
- 2: Pirl2.*
- 3: Pirl3.*
- 4: Pirl4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----------|--------------------|
| 1 | 519 | 81.6 | 139 | 2 G29380 | Ig heavy chain pre |
| 2 | 509.5 | 80.1 | 115 | 1 AVMS06 | Ig heavy chain V-I |
| 3 | 505.5 | 79.5 | 113 | 1 AVMSAB | Ig heavy chain V-I |
| 4 | 504.5 | 79.3 | 115 | 1 AVMS82 | Ig heavy chain V-I |
| 5 | 502.5 | 79.0 | 113 | 1 AVMSB7 | Ig heavy chain V-I |
| 6 | 499.5 | 78.5 | 113 | 1 AVMS61 | Ig heavy chain V-I |
| 7 | 498.5 | 78.4 | 115 | 2 A25803 | Ig heavy chain V-I |
| 8 | 496.5 | 78.1 | 113 | 1 AVMS57 | Ig heavy chain V-I |
| 9 | 495.5 | 77.9 | 113 | 1 AVMS09 | Ig heavy chain V-I |
| 10 | 494 | 77.7 | 139 | 2 FC1213 | Ig heavy chain pre |
| 11 | 489 | 76.9 | 111 | 1 MHMS76 | Ig heavy chain V-I |
| 12 | 488 | 76.7 | 115 | 2 S38714 | Ig heavy chain V-I |
| 13 | 487 | 76.6 | 118 | 2 A31485 | Ig heavy chain V-I |
| 14 | 480.5 | 75.6 | 113 | 1 HVMSAM | Ig heavy chain V-I |
| 15 | 470.5 | 74.0 | 121 | 2 S0958 | Ig heavy chain V-D |
| 16 | 470 | 73.9 | 137 | 2 B34903 | Ig heavy chain pre |
| 17 | 469 | 73.7 | 116 | 2 H29380 | Ig heavy chain pre |
| 18 | 467 | 73.4 | 137 | 2 D34903 | Ig heavy chain pre |
| 19 | 466.5 | 73.3 | 125 | 2 S67945 | Ig heavy chain pre |
| 20 | 462 | 72.6 | 137 | 2 F34903 | Ig heavy chain pre |
| 21 | 454.5 | 71.5 | 142 | 1 EVRR2 | Ig heavy chain pre |
| 22 | 453 | 71.2 | 106 | 2 S24521 | Ig heavy chain pre |
| 23 | 447 | 70.3 | 137 | 2 A34903 | Ig heavy chain V-I |
| 24 | 445 | 70.0 | 137 | 2 B34903 | Ig heavy chain pre |
| 25 | 440.5 | 69.3 | 117 | 2 S31109 | Ig heavy chain - h |
| 26 | 435.5 | 68.5 | 121 | 2 H36005 | Ig heavy chain V-I |
| 27 | 427.5 | 67.2 | 121 | 2 S31106 | Ig heavy chain - h |
| 28 | 423.5 | 66.6 | 123 | 2 A36006 | Ig heavy chain V-I |
| 29 | 421.5 | 66.3 | 125 | 2 S30531 | Ig heavy chain V-I |

30 421 66.2 147 2 I37780 Ig variable region
31 418.5 65.8 123 2 S26794 Ig heavy chain V-I
32 418.5 65.8 139 2 S31678 Ig heavy chain V-I
33 418 65.7 136 2 S31587 Ig heavy chain V-I
34 418 65.7 141 2 I32513 Ig heavy chain pre
35 417 65.6 120 2 S12953 Ig heavy chain V-I
36 416.5 65.5 143 2 S23624 Ig heavy chain V-I
37 416 65.4 140 2 S70442 Ig heavy chain pre
38 415.5 65.3 117 2 S78486 Ig heavy chain V-I
39 415.5 65.3 121 2 A41940 Ig heavy chain V-I
40 415 65.3 122 1 AVMS63 Ig heavy chain V-I
41 415 65.3 124 2 F30539 Ig heavy chain V-I
42 413 64.9 124 2 S20775 Ig heavy chain V-I
43 413 64.9 136 1 GLMS21 Ig heavy chain pre
44 413 64.9 145 2 S03844 Ig heavy chain pre
45 412.5 64.9 123 1 AVMSH8 Ig heavy chain V-I

ALIGNMENTS

RESULT 1

G29380 Ig heavy chain precursor V region (BC-1004) - mouse (fragment)

C:Species: Mus musculus (house mouse)

C>Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 16-Aug-1996
C:Accession: G29380

R:Chen, H.T.; Kabat, E.A.; Lundblad, A.; Ratcliffe, R.M.

J. Biol. Chem. 262, 13579-13583, 1987

A:Title: Nucleotide and translated amino acid sequences of cDNA coding for the variable

A:Reference number: A92612; MUID:88007582; PMID:3115981

A:Accession: G29380

A:Molecule type: mRNA

A:Residues: 1-139 <CH>

C:Superfamily: immunoglobulin V region; immunoglobulin homology

C:Keywords: heterotetramer; immunoglobulin

F:34-119/Domain: immunoglobulin homology <IMM>

Query Match 81.6%; Score 519; DB 2; Length 139;

Best Local Similarity 79.8%; Pred. No. 2.5e-39;

Matches 95; Conservative 11; Mismatches 13; Indels 0; Gaps 0;

QY 1 EVKLESGGGLVOPGSGMKLSVAGSFIFSNHNNWVQSPKGLWVAETRSKINSAT 60

Db 20 EVKLESGGGLVOPGSGMKLSVAGSFIFSNHNNWVQSPKGLWVAETRSKINSAT 79

QY 61 HYAESVKGRTISRDDSKSAVLTQDTRDTGVYCSRNVYGSYDYWGQGITLTVS 119

Db 80 YTESVKGRTISRDDSKSNVYLQNSLRADTGIIYCTRDYVYGAEFAYWGQGITLTVS 138

RESULT 2

AVMS06

Ig heavy chain V-III region (J606) - mouse

C:Species: Mus musculus (house mouse)

C>Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004

C:Accession: C92811; A02072

R:Johnson, N.; Slankard, J.; Paul, L.; Hood, L.

J. Immunol. 128, 302-307, 1982

A:Title: The complete V domain amino acid sequences of two myeloma inulin-binding protein

A:Reference number: A92811; MUID:82099361; PMID:6798111

A:Accession: C92811

A:Molecule type: protein

A:Residues: 1-115 <JH>

A:Cross-references: UNIPROT:P01801

C:Comment: This chain was isolated from a myeloma protein that binds inulin.

C:Superfamily: immunoglobulin V region; immunoglobulin

C:Keywords: heterotetramer; immunoglobulin

F:15-100/Domain: immunoglobulin homology <IMM>

F:22-98/Disulfide bonds: #status predicted

Query Match 80.1%; Score 509.5; DB 1; Length 115;

Best Local Similarity 81.5%; Pred. No. 1.5e-38;

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Matches 97; Conservative 8; Mismatches 9; Indels 5; Gaps 1;
Qy 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 114

RESULT 3
AVMSB8
Ig heavy chain V-III region (A4) - mouse
C:Species: Mus musculus (house mouse)
C>Date: 24-Apr-1984 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: A93818; A02072
R:Vrana, M.; Rudikoff, S.; Potter, M.
Proc. Natl. Acad. Sci. U.S.A. 75, 1957-1961, 1978
A:Title: Sequence variation among heavy chains from inulin-binding myeloma proteins.
A:Reference number: A93818; MUID:78158406; PMID:417344
A:Accession: A93818
A:Molecule type: protein
A:Residues: 1-113 <VRA>
A:Cross-references: UNIPROT:P01796
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 79.5%; Score 505.5; DB 1; Length 113;
Best Local Similarity 81.4%; Pred. No. 3.2e-38;
Matches 96; Conservative 8; Mismatches 9; Indels 5; Gaps 1;
Qy 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 118
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 113

RESULT 4
AVMS2
Ig heavy chain V-III region (W3082) - mouse
C:Species: Mus musculus (house mouse)
C>Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: D92811; A02072
R:Johnson, N.; Slankard, J.; Paul, L.; Hood, L.
J. Immunol. 128, 302-307, 1982
A:Title: The complete V domain amino acid sequences of two myeloma inulin-binding proteins.
A:Reference number: A92811; MUID:8209361; PMID:6798111
A:Accession: D92811
A:Molecule type: protein
A:Residues: 1-115 <JOH>
A:Cross-references: UNIPROT:P01802
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 79.3%; Score 504.5; DB 1; Length 115;
Best Local Similarity 80.7%; Pred. No. 4e-38;
Matches 96; Conservative 9; Mismatches 9; Indels 5; Gaps 1;
Qy 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 119

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Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTVS 114

RESULT 5
AVMSB7
Ig heavy chain V-III region (ABE-47N) - mouse
C:Species: Mus musculus (house mouse)
C>Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: A90400; A02072
R:Vrana, M.; Rudikoff, S.; Potter, M.
Biochemistry 16, 1170-1175, 1977
A:Title: Heavy-chain variable-region sequence from an inulin-binding myeloma protein.
A:Reference number: A90400; MUID:77134726; PMID:402936
A:Accession: A90400
A:Molecule type: protein
A:Residues: 1-113 <VRA>
A:Cross-references: UNIPROT:P01799
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 79.0%; Score 502.5; DB 1; Length 113;
Best Local Similarity 81.4%; Pred. No. 6e-38;
Matches 96; Conservative 7; Mismatches 10; Indels 5; Gaps 1;
Qy 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 118
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 113

RESULT 6
AVMS61
Ig heavy chain V-III region (U61) - mouse
C:Species: Mus musculus (house mouse)
C>Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: B93818; A02072
R:Vrana, M.; Rudikoff, S.; Potter, M.
Proc. Natl. Acad. Sci. U.S.A. 75, 1957-1961, 1978
A:Title: Sequence variation among heavy chains from inulin-binding myeloma proteins.
A:Reference number: A93818; MUID:78158406; PMID:417344
A:Accession: B93818
A:Molecule type: protein
A:Residues: 1-113 <VRA>
A:Cross-references: UNIPROT:P01797
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 78.5%; Score 499.5; DB 1; Length 113;
Best Local Similarity 80.5%; Pred. No. 1.1e-37;
Matches 95; Conservative 8; Mismatches 10; Indels 5; Gaps 1;
Qy 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHNNWVRSPEKGLEWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 118
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTDTGVYCSRNYYGSTDYWGQGTTLTV 113

RESULT 7
A29803
Ig heavy chain V region (2S1.3) - mouse

```

C:Species: Mus musculus (house mouse)
C:Date: 28-Dec-1987 #sequence_revision 28-Dec-1987 #text_change 16-Aug-1996
C:Accession: A25803
R:Herbst, H.; Grutter, T.; Aebersold, R.; Braun, D.G.
Biol. Chem. Hoppe-Seyler 367, 843-851, 1996
A:Title: The complete amino-acid sequence of the variable domain of a monoclonal anti-
A:Reference number: A25803; MUID:87076047; PMID:3539142
A:Accession: A25803
A:Molecule type: protein
A:Residues: 1-115 <HER>
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>

Query Match 78.4%; Score 498.5; DB 2; Length 115;
Best Local Similarity 80.5%; Pred. No. 1.4e-37;
Matches 95; Conservative 7; Mismatches 13; Indels 3; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 115

RESULT 8
AVMS7
Ig heavy chain V-III region (T957) - mouse
C:Species: Mus musculus (house mouse)
C:Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: A92810; A02072
R:Rudikoff, S.; Potter, M.
J. Immunol. 127, 191-194, 1981
A:Title: Immunoglobulin heavy chains from anti-inulin myeloma proteins: evidence for a
A:Reference number: A92810; MUID:81216632; PMID:6787122
A:Accession: A92810
A:Molecule type: protein
A:Residues: 1-113 <RUD>
A:Cross-references: UNIPROT:P01800
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 78.1%; Score 496.5; DB 1; Length 113;
Best Local Similarity 80.5%; Pred. No. 2e-37;
Matches 95; Conservative 7; Mismatches 11; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 113

RESULT 9
AVMS09
Ig heavy chain V-III region (E109) - mouse
C:Species: Mus musculus (house mouse)
C:Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C:Accession: A93818; A02072
R:Vrana, M.; Rudikoff, S.; Potter, M.
Proc. Natl. Acad. Sci. U.S.A. 75, 1957-1961, 1978
A:Title: Sequence variation among heavy chains from inulin-binding myeloma proteins.
A:Reference number: A93818; MUID:78158406; PMID:417344
A:Accession: A93818
A:Molecule type: protein
A:Residues: 1-113 <VRA>

A:Cross-references: UNIPROT:P01798
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match 77.9%; Score 495.5; DB 1; Length 113;
Best Local Similarity 78.8%; Pred. No. 2.5e-37;
Matches 93; Conservative 11; Mismatches 9; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 113

RESULT 10
PCI213
Ig heavy chain precursor V region (mAb H8) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 23-Jul-1999
C:Accession: PCI213
R:Hong, H.J.; Kim, A.K.; Ryu, C.J.; Park, S.S.; Chung, H.K.; Kim, K.L.; Kim, K.M.
Gene 121, 331-335, 1992
A:Title: Cloning and characterization of cDNAs coding for heavy and light chains of a m
A:Reference number: PCI213; MUID:93077049; PMID:1445832
A:Accession: PCI213
A:Molecule type: mRNA
A:Residues: 1-139 <HON>
A:Cross-references: GB:M98041; MID:g195092; PIDN:AAA38159.1; PID:g195093
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:1-19/Domain: signal sequence #status predicted <SIG>
F:20-139/Product: Ig heavy chain V region #status predicted <VAT>
F:34-119/Domain: immunoglobulin homology <IMM>

Query Match 77.7%; Score 494; DB 2; Length 139;
Best Local Similarity 78.2%; Pred. No. 4.3e-37;
Matches 93; Conservative 10; Mismatches 16; Indels 0; Gaps 0;

QY 1 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 60
DB 20 EVKLEESGGGLVQPGGSKMLSCVASGFIENHNNWVWVQSPKGLWVAEIRKINSAT 79

QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 119
DB 80 YAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGTYDYWGQGTTLTV 138

RESULT 11
MHMS76
Ig heavy chain V-III region (HPC76) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 30-Sep-1980 #sequence_revision 30-Sep-1980 #text_change 09-Jul-2004
C:Accession: A02074
R:Bernard, O.; Gough, N.M.
Proc. Natl. Acad. Sci. U.S.A. 77, 3630-3634, 1980
A:Title: Nucleotide sequence of immunoglobulin heavy chain joining segments between tra
A:Reference number: A02074; MUID:81013937; PMID:6251474
A:Accession: A02074
A:Molecule type: mRNA
A:Residues: 1-111 <BER>
A:Cross-references: UNIPROT:P01804
A:Note: the sequence was also determined from the differentiated gene
A:Note: the sequence of the first 197 residues of the C region was also determined and
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:10-94/Domain: immunoglobulin homology <IMM>
F:17-92/Disulfide bonds: #status predicted

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Query Match      76.9%; Score 489; DB 1; Length 111;
Best Local Similarity 83.3%; Pred. No. 9.2e-37;
Matches 95; Conservative 5; Mismatches 10; Indels 4; Gaps 2;

QY 6 ESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRSKINSATHYAES 65
DB 1 ESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRLKS-GVATHYAES 59

QY 66 VKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
DB 60 VKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 110

RESULT 12
S38714
IG heavy chain V region - mouse
C:Species: Mus musculus (house mouse)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 20-Jun-2000
C:Accession: S38714
R:Cimanis, A.Y.
submitted to the EMBL Data Library, November 1993
A:Reference number: S38713
A:Accession: S38714
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-115 <C1M>
A:Cross-references: EMBL:X76014; NID:9416092; PIDN:CAA53601.1; PID:g1334076
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:14-99/Domain: immunoglobulin homology <IMM>

Query Match      76.7%; Score 488; DB 2; Length 115;
Best Local Similarity 78.8%; Pred. No. 1.2e-36;
Matches 93; Conservative 8; Mismatches 13; Indels 4; Gaps 1;

QY 2 VKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRSKINSATH 61
DB 1 VKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRLKSNDYATH 60

QY 62 YAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
DB 61 YAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 114

RESULT 13
A31485
IG heavy chain V region (4-4-20) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 31-Jul-1989 #sequence_revision 31-Jul-1989 #text_change 16-Aug-1996
C:Accession: A31485
R:Bedzyk, W.D.; Johnson, L.S.; Riordan, G.S.; Voss Jr., E.W.
J. Biol. Chem. 264, 1565-1569, 1989
A:Title: Comparison of variable region primary structures within an anti-fluorescein idi
A:Reference number: A31485; MUID:89109167; PMID:2492278
A:Accession: A31485
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-118 <BED>
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>

Query Match      76.6%; Score 487; DB 2; Length 118;
Best Local Similarity 74.8%; Pred. No. 1.5e-36;
Matches 89; Conservative 16; Mismatches 12; Indels 2; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRLKNPNYET 60

QY 61 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
DB 60 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 120

Search completed: December 15, 2004, 17:21:48
Job time : 25.7478 secs

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DB 61 YYSDSVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 117

RESULT 14
HVSAM
IG heavy chain V region (AMPC1) - mouse
C:Species: Mus musculus (house mouse)
C:Date: 18-Aug-1992 #sequence_revision 18-Aug-1992 #text_change 09-Jul-2004
C:Accession: A02073
R:Rudikoff, S.; Potter, M.
J. Immunol. 127, 191-194, 1981
A:Title: Immunoglobulin heavy chains from anti-inulin myeloma proteins: evidence for a n
A:Reference number: A92810; MUID:81216632; PMID:6787122
A:Accession: A02073
A:Molecule type: protein
A:Residues: 1-113 <RUD>
A:Cross-references: UNIPROT:P01803
C:Comment: This chain was isolated from a myeloma protein that binds inulin.
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>
F:22-98/Disulfide bonds: #status predicted

Query Match      75.6%; Score 480.5; DB 1; Length 113;
Best Local Similarity 78.8%; Pred. No. 5.4e-36;
Matches 93; Conservative 7; Mismatches 13; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRLKSNEYAI 60

QY 61 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTV 118
DB 61 HYAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTV 113

RESULT 15
S09958
IG heavy chain V-D-J region (1E10) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 23-Jul-1999
C:Accession: S09958
R:Reininger, L.; Shibata, T.; Ozaki, S.; Shirai, T.; Jatou, J.C.; Izui, S.
Eur. J. Immunol. 20, 771-777, 1990
A:Title: Variable region sequences of pathogenic anti-mouse red blood cell autoantibodie
A:Reference number: S09955; MUID:90269328; PMID:2347362
A:Accession: S09958
A:Molecule type: mRNA
A:Residues: 1-121 <REI>
A:Cross-references: EMBL:X51846; NID:955246; PIDN:CAA36139.1; PID:g930214
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
F:15-100/Domain: immunoglobulin homology <IMM>

Query Match      74.0%; Score 470.5; DB 2; Length 121;
Best Local Similarity 73.9%; Pred. No. 4.5e-35;
Matches 88; Conservative 12; Mismatches 18; Indels 1; Gaps 1;

QY 2 VKLEESGGGLVQPGGSKMLSCVSGGTFISNHNWVQSPKGLWVAEIRSKINSATH 61
DB 2 VKLXXGGGLVQPGGSKMLSCVSGGTFISDAMDVQSPKGLWVAEIRKANNHATY 61

QY 62 YAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 119
DB 62 YAESVKGRFTISRDDSKSAVYLTQMTDLRTDTGVYCSRNYGSTDYWGQGTTLTVS 120

Search completed: December 15, 2004, 17:21:48
Job time : 25.7478 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 15, 2004, 17:01:54 ; Search time 132.164 Seconds
(without alignments)
518.066 Million cell updates/sec

Title: US-09-897-724-5

Perfect score: 636

Sequence: 1 EVKLESGGLVPGGSMKL.....RNYGYSTYVWGQGTTLTVS 119

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt 02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
| 1 | 515.5 | 81.1 | 487 | 2 | Q80217 |
| 2 | 509.5 | 80.1 | 115 | 1 | HV32_MOUSE |
| 3 | 505.5 | 79.5 | 113 | 1 | HV27_MOUSE |
| 4 | 504.5 | 79.3 | 115 | 1 | HV33_MOUSE |
| 5 | 503.5 | 79.2 | 464 | 2 | Q6P1P8 |
| 6 | 503.5 | 79.2 | 464 | 2 | AAH31470 |
| 7 | 502.5 | 79.0 | 113 | 1 | HV30_MOUSE |
| 8 | 499.5 | 78.5 | 113 | 1 | HV28_MOUSE |
| 9 | 496.5 | 78.1 | 113 | 1 | HV31_MOUSE |
| 10 | 495.5 | 77.9 | 113 | 1 | HV29_MOUSE |
| 11 | 489 | 76.9 | 111 | 1 | HV35_MOUSE |
| 12 | 480.5 | 75.6 | 113 | 1 | HV34_MOUSE |
| 13 | 454.5 | 71.5 | 142 | 1 | HV01_RAT |
| 14 | 443 | 69.7 | 479 | 2 | Q7TWK4 |
| 15 | 421 | 66.2 | 121 | 2 | BAD00413 |
| 16 | 417.5 | 65.6 | 485 | 2 | Q6PDB8 |
| 17 | 417.5 | 65.6 | 485 | 2 | AAH58814 |
| 18 | 415 | 65.3 | 122 | 1 | HV20_MOUSE |
| 19 | 415 | 65.3 | 473 | 2 | Q91205 |
| 20 | 413 | 64.9 | 136 | 1 | HV16_MOUSE |
| 21 | 412.5 | 64.9 | 123 | 1 | HV23_MOUSE |
| 22 | 412.5 | 64.9 | 470 | 2 | Q6PUA4 |
| 23 | 412.5 | 64.9 | 470 | 2 | AAH18747 |
| 24 | 412.5 | 64.9 | 493 | 2 | Q6GMX2 |
| 25 | 411.5 | 64.7 | 123 | 1 | HV18_MOUSE |
| 26 | 410.5 | 64.5 | 478 | 2 | Q6P181 |
| 27 | 410.5 | 64.5 | 478 | 2 | AAH41037 |
| 28 | 408.5 | 64.2 | 124 | 2 | BAD00534 |
| 29 | 408 | 64.2 | 121 | 2 | BAD00404 |
| 30 | 407.5 | 64.1 | 123 | 1 | HV19_MOUSE |
| 31 | 407 | 64.0 | 125 | 2 | BAD00491 |

32 406.5 63.9 128 2 BAD00406
33 406 63.8 123 2 BAD00520
34 405 63.7 118 2 AAL35882
35 405 63.7 122 1 HV21_MOUSE
36 404.5 63.6 124 2 BAD00530
37 404 63.5 118 2 Q9UL91
38 404 63.5 121 2 BAD00435
39 403 63.4 487 2 Q99KA4
40 403 63.4 606 2 Q6GMV2
41 401.5 63.1 255 2 Q6KB05
42 401.5 63.1 255 2 CAG34081
43 401 63.1 121 2 BAD00469
44 401 63.1 123 2 BAD00405
45 401 63.1 465 2 Q6P6C4

ALIGNMENTS

RESULT 1

Q80217 PRELIMINARY; PRT; 487 AA.
AC Q80217;
DT 01-JUN-2003 (Tremblrel. 24, Created)
DT 01-JUN-2003 (Tremblrel. 24, Last sequence update)
DT 01-MAR-2004 (Tremblrel. 26, Last annotation update)
DE Hypothetical protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=FVB/N; TISSUE=Colon;
RX MEDLINE=23838257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Mullany S.J.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Prange C.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Rulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
FAhey J., Helton E., Kettaman M., Madan A., Rodriguez S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=FVB/N; TISSUE=Colon;
RA Strausberg R.;
RL Submitted (MAR-2003) to the EMBL/GenBank/DBJ databases.
EMBL; BC049143; AAH49143.1; -.
DR HSSP; P01789; IMCP.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003597; IG-cl.
DR InterPro; IPR003006; IG_MHC.
DR InterPro; IPR003596; IG_v.
DR Pfam; PF07654; CI-set; 2.
DR Pfam; PF00047; IG; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 487 AA; 53019 MW; 31F2C899900A4D80 CRC64;

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Query Match      81.1%; Score 515.5; DB 2; Length 487;
Best Local Similarity 79.5%; Pred. No. 3.2e-43;
Matches 97; Conservative 9; Mismatches 13; Indels 3; Gaps 1;

Qy 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Db 20 EVKLEAGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 79
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 117
Db 80 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 139
Qy 118 VS 119
Db 140 VS 141

RESULT 2
HV32 MOUSE
ID HV32 MOUSE STANDARD; PRT; 115 AA.
AC P01801;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Ig heavy chain V-III region J606.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=82099361; PubMed=6798111;
RA Johnson N., Slankard J., Paul L., Hood L.;
RT "The complete V domain amino acid sequences of two myeloma inulin-
binding proteins."
RL J. Immunol. 128:302-307(1982).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; C92811; AVMS06.
DR HSSP; P01852; INFD.
DR InterPro; IPR007110; IG-Like.
DR InterPro; IPR003596; IG_v.
DR Pfam; PF00047; IG_1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 1.
DR Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 114
FT DISULFID 22 98
FT NON_TER 115 115
FT SEQUENCE 115 AA; 12810 MW; B67AD6639A121ASF CRC64;

Query Match      80.1%; Score 509.5; DB 1; Length 115;
Best Local Similarity 81.5%; Pred. No. 2.5e-43;
Matches 97; Conservative 8; Mismatches 9; Indels 5; Gaps 1;

Qy 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 119
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 114

RESULT 3
HV27 MOUSE
ID HV27 MOUSE STANDARD; PRT; 113 AA.
AC P01796;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Ig heavy chain V-III region J606.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=82099361; PubMed=6798111;
RA Johnson N., Slankard J., Paul L., Hood L.;
RT "The complete V domain amino acid sequences of two myeloma inulin-
binding proteins."
RL J. Immunol. 128:302-307(1982).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; C92811; AVMS06.
DR HSSP; P01852; INFD.
DR InterPro; IPR007110; IG-Like.
DR InterPro; IPR003596; IG_v.
DR Pfam; PF00047; IG_1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 1.
DR Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 114
FT DISULFID 22 98
FT NON_TER 115 115
FT SEQUENCE 115 AA; 12810 MW; B67AD6639A121ASF CRC64;

Query Match      81.5%; Score 505.5; DB 1; Length 113;
Best Local Similarity 81.4%; Pred. No. 6.2e-43;
Matches 96; Conservative 8; Mismatches 9; Indels 5; Gaps 1;

Qy 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 118
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 113

RESULT 4
HV33 MOUSE
ID HV33 MOUSE STANDARD; PRT; 115 AA.
AC P01802;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Ig heavy chain V-III region W3082.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=82099361; PubMed=6798111;
RA Johnson N., Slankard J., Paul L., Hood L.;
RT "The complete V domain amino acid sequences of two myeloma inulin-
binding proteins."
RL J. Immunol. 128:302-307(1982).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; D92811; AVMS92.
DR HSSP; P01852; INFD.
DR InterPro; IPR007110; IG-Like.
DR InterPro; IPR003596; IG_v.
DR Pfam; PF00047; IG_1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 1.
DR Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 114
FT DISULFID 22 98
FT SEQUENCE 113 AA; 12675 MW; 76658C121C598285 CRC64;

Query Match      79.5%; Score 505.5; DB 1; Length 113;
Best Local Similarity 81.4%; Pred. No. 6.2e-43;
Matches 96; Conservative 8; Mismatches 9; Indels 5; Gaps 1;

Qy 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Db 1 EVKLEESGGGLVPGGSMKLSVAGSFIFSNHNNWVRQSPKGLWVAEIRKSNYSAT 60
Qy 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 118
Db 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSGT---VDYWGQGTTLT 113

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FT NON TER 115 115
SQ SEQUENCE 115 AA; 12887 MW; 9B4517648C121C5A CRC64;

Query Match 79.3%; Score 504.5; DB 1; Length 115;
Best Local Similarity 79.8%; Pred. No. 8e-43;
Matches 96; Conservative 9; Mismatches 9; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSINSAT 60
Db 1 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSHNYAT 60

QY 61 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 119
Db 61 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 119

RESULT 5
Q6PIP8 PRELIMINARY; PRT; 464 AA.
AC Q6PIP8
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Czech II;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
Proc. Natl. Acad. Sci. U.S.A. 99:16999-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Czech II;
RX TISSUE=Mammary tumor metastatized to lung. Tumor arose spontaneously;
RA Strausberg R.;
RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC031470; AAH31470.1; -.
DR InterPro; IPR003599; IG.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003597; IG cl.
DR InterPro; IPR003006; IG_MHC.
DR InterPro; IPR003596; IG v.
DR Pfam; PF07654; C1-set; 3.
DR Pfam; PF00047; IG; 4.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGc1; 3.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_1.
KW Hypothetical protein.

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SQ SEQUENCE 464 AA; 51246 MW; FDAC40A45B5E1443 CRC64;

Query Match 79.2%; Score 503.5; DB 2; Length 464;
Best Local Similarity 79.8%; Pred. No. 4.9e-42;
Matches 95; Conservative 9; Mismatches 10; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSINSAT 60
Db 20 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSDNAT 79

QY 61 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 119
Db 80 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 133

RESULT 6
AAH31470 PRELIMINARY; PRT; 464 AA.
AC AAH31470
DT 02-MAR-2004 (TrEMBLrel. 27, Created)
DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Czech II; TISSUE=Mammary tumor;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
Proc. Natl. Acad. Sci. U.S.A. 99:16999-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Czech II; TISSUE=Mammary tumor;
RA Strausberg R.;
RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC031470; AAH31470.1; -.
KW Hypothetical protein.
SQ SEQUENCE 464 AA; 51246 MW; FDAC40A45B5E1443 CRC64;

Query Match 79.2%; Score 503.5; DB 2; Length 464;
Best Local Similarity 79.8%; Pred. No. 4.9e-42;
Matches 95; Conservative 9; Mismatches 10; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSINSAT 60
Db 20 EVKLEESGGGLVQPGGSMKLSVASGFTFSNHNWVWVRSPEKGLWVAIRKLSDNAT 79

QY 61 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 119
Db 80 HYAESVKGGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYVWGQGTTLTVS 133

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RESULT 7
HV30_MOUSE
ID HV30_MOUSE STANDARD; PRT; 113 AA.
AC P01739;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE IG heavy chain V-III region ABE-47N.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_taxid=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=77134726; PubMed=402936;
RA Vrana M., Rudikoff S., Potter M.;
RT "Heavy-chain variable-region sequence from an inulin-binding myeloma
protein.";
RL Biochemistry 16:1170-1175(1977).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; A90400; AVMSB7.
DR HSSP; P01810; 2FEJ.
DR InterPro; IPR007110; Ig-like.
DR Pfam; PF00047; Ig_1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 >113
FT DISULFID 22 98
FT NON_TER 113 113
FT SEQUENCE 113 AA; 12675 MW; 76658C16C779845E CRC64;
SQ
Query Match 79.0%; Score 502.5; DB 1; Length 113;
Best Local Similarity 81.4%; Pred. No. 1.2e-42;
Matches 96; Conservative 7; Mismatches 10; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 113
RESULT 8
HV28_MOUSE
ID HV28_MOUSE STANDARD; PRT; 113 AA.
AC P01737;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE IG heavy chain V-III region U61.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_taxid=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=78158406; PubMed=417344;
RA Vrana M., Rudikoff S., Potter M.;
RT "Sequence variation among heavy chains from inulin-binding myeloma
proteins.";
RL Proc. Natl. Acad. Sci. U.S.A. 75:1957-1961(1978).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; B93818; AVMS61.
DR HSSP; P01783; 1IGC.
DR InterPro; IPR007110; Ig-like.

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DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; Ig; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 >113
FT DISULFID 22 98
FT NON_TER 113 113
FT SEQUENCE 113 AA; 12671 MW; 76634C121CS98285 CRC64;
SQ
Query Match 78.5%; Score 499.5; DB 1; Length 113;
Best Local Similarity 80.5%; Pred. No. 2.5e-42;
Matches 95; Conservative 8; Mismatches 10; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 113
RESULT 9
HV31_MOUSE
ID HV31_MOUSE STANDARD; PRT; 113 AA.
AC P01800;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-OCT-1993 (Rel. 27, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE IG heavy chain V-III region T957.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_taxid=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=81216632; PubMed=6787122;
RA Rudikoff S., Potter M.;
RT "Immunoglobulin heavy chains from anti-inulin myeloma proteins:
evidence for a new heavy chain joining segment.";
RL J. Immunol. 127:191-194(1991).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
DR PIR; A92810; AVMS57.
DR HSSP; P01783; 1IGC.
DR InterPro; IPR007110; Ig-like.
DR Pfam; PF00047; Ig_1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 >113
FT DISULFID 22 98
FT NON_TER 113 113
FT SEQUENCE 113 AA; 12732 MW; 28618F626B598592 CRC64;
SQ
Query Match 78.1%; Score 496.5; DB 1; Length 113;
Best Local Similarity 80.5%; Pred. No. 5e-42;
Matches 95; Conservative 7; Mismatches 11; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGTFISFNHNNWVWVRSPEKGLWVAIRLSKSHYAT 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYVCSRNYYGSTDYDYGQGTLLTV 113
RESULT 10
HV29_MOUSE

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ID HV29_MOUSE STANDARD; PRT; 113 AA.
AC P01798;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE IG heavy chain V-III region E109.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE
RX MEDLINE=78158406; PubMed=417344;
RA Vrana M., Rudikoff S., Potter M.;
RT "Sequence variation among heavy chains from inulin-binding myeloma
RL proteins."
RL Proc. Natl. Acad. Sci. U.S.A. 75:1957-1961(1978).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
CC binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
CC PIR; C93818; AVMS09.
DR HSSP; P01783; IIGC.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; Ig; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 >113
FT DISULFID 22 98
FT NON_TER 113 113
FT SEQUENCE 113 AA; 12647 MW; E50F2F0EBD129B CRC64;
SQ
Query Match 77.9%; Score 495.5; DB 1; Length 113;
Best Local Similarity 78.8%; Pred. No. 6.3e-42;
Matches 93; Conservative 11; Mismatches 9; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRKSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRKSHNYAI 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTV 118
DB 61 HYAESVKGRTISRDDSKSAVFLQMNLRADETGIHYCT-----TGFAYWGQGTTLTV 113

RESULT 11
HV35_MOUSE STANDARD; PRT; 111 AA.
AC P01804;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE IG heavy chain V-III region HPC76 (Fragment).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=81013937; PubMed=6251474;
RA Bernard C., Gough N.M.;
RT "Nucleotide sequence of immunoglobulin heavy chain joining segments
RL between translocated VH and mu constant regions genes."
RL Proc. Natl. Acad. Sci. U.S.A. 77:3630-3634(1980).
CC -!- MISCELLANEOUS: The sequence of the first 197 residues of the C
CC region was also determined and differs in only 3 positions from
CC the corresponding portion of the mouse MOPC 104e mu chain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
CC PIR; A02074; MHMS76.
DR HSSP; P01852; INFD.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_v.

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DR Pfam; PF00047; IGV; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Immunoglobulin V region.
FT NON_TER 1 1
FT DOMAIN <1 110
FT NON_TER 111 111
FT SEQUENCE 111 AA; 12304 MW; OEDE98EC7348056A CRC64;
SQ
Query Match 76.9%; Score 489; DB 1; Length 111;
Best Local Similarity 83.3%; Pred. No. 2.8e-41;
Matches 95; Conservative 5; Mismatches 10; Indels 4; Gaps 2;

QY 6 ESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRKSKINSATHYAES 65
DB 1 ESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRLKS-GYATHYAES 59
QY 66 YKGRFTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTVS 119
DB 60 VKGRFTISRDDSKSAVYLQMNLRADETGIYYCTR---PGVPDYWGQGTTLTVS 110

RESULT 12
HV34_MOUSE STANDARD; PRT; 113 AA.
AC P01803;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE IG heavy chain V region AMPC1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE.
RX MEDLINE=81216632; PubMed=6787122;
RA Rudikoff S., Potter M.;
RT "Immunoglobulin heavy chains from anti-inulin myeloma proteins:
RT evidence for a new heavy chain joining segment."
RL J. Immunol. 127:191-194(1981).
CC -!- MISCELLANEOUS: This chain was isolated from a myeloma protein that
CC binds inulin.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
CC PIR; A02073; HVMSAM.
DR HSSP; P01783; IIGC.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF00047; IGV; 1.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG LIKE; 1.
KW Direct protein sequencing; Immunoglobulin V region.
FT DOMAIN 1 >113
FT DISULFID 22 98
FT NON_TER 113 113
FT SEQUENCE 113 AA; 12691 MW; 7A6D906AAA966E9E CRC64;
SQ
Query Match 75.6%; Score 480.5; DB 1; Length 113;
Best Local Similarity 78.8%; Pred. No. 2e-40;
Matches 93; Conservative 7; Mismatches 13; Indels 5; Gaps 1;

QY 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRKSKINSAT 60
DB 1 EVKLEESGGGLVQPGGSKLSCVASGFIFSNHWMWVWVQSPKGLWVAEIRLKSHNYAI 60
QY 61 HYAESVKGRTISRDDSKSAVYLQMTDLRTEDTGYYCSRNYYGSTDYWGQGTTLTV 118
DB 61 HYAESVKGRTISRDDSKSAVYLQMNLRADETGIYYCS-----TGFPSWGPGTLTV 113

RESULT 13
HV01_RAT STANDARD; PRT; 142 AA.
ID HV01_RAT

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RESULT 14
Q7TMK4 PRELIMINARY; PRT; 479 AA.
Q7TMK4 Q7TMK4
AAC Q1-OCT-2003 (TrEMBLrel. 25, Created)
ADT Q1-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DDT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Hypothetical protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OCC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
NCBI_TaxID=10090;
RN [1]
RRP SEQUENCE FROM N.A.
RRC STRAIN=mix FVB/N;
RRC TISSUE=Mammary tumor WAP-TGF alpha model. 7 months old;
PRX MEDLINE=2338257; Pubmed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.C., Rubin G.M., Hong L.,
RA Staclenkov M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

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Query Match      69.7%; Score 443; DB 2; Length 479;
Best Local Similarity 68.9%; Pred. No. 6.1e-36;
Matches 82; Conservative 16; Mismatches 17; Indels 4; Gaps 1;
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| | | | |
|-----|-------|---|-------|
| | 1 | EVLKLEESGGGLVQPGGSMKLSCVASGFIFSNHWNWVQSPEKGLEWVAETRISKINSAT | 60 |
| QY | ::::: | ::::: | ::::: |
| Ddb | 20 | EVLKDETGGGLVQGRPMKLSVASGFIFGDYMWNVQSPEKGLEWVSQIRNKPYNYET | 79 |
| | | ::::: | ::::: |
| QY | 61 | HYAESVKGRRTISRDSDSKSAVQLMTDLTEBTGYVCSRNYYGSTYDYWGCGTTLTVS | 119 |
| | ::::: | ::::: | ::::: |
| Ddb | 80 | YYSDSVKGRFTISRDDSKSGVYLQMNLNPEDMGIIYCT---VEGMDYWGREGISVTVS | 134 |

RESULT 15
BAD00413

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RESULT 15
BAD00413 - PRELIMINARY; PRT; 121 AA.
ID BAD00413;
AC BAD00413;
DT 02-MAR-2004 (TREMBlRel. 27, Created)
DT 02-MAR-2004 (TREMBlRel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlRel. 27, Last annotation update)
DE Immunoglobulin heavy chain VH D3 region (Fragment).
IGVH.
OS Camelus dromedarius (Dromedary) (Arabian camel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
OC NCBI_TaxID=9838;
OX [1]
RN
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RA Honda T., Akahori Y., Kurosawa Y.;
RT "Libraries of heavy-chain antibodies reflecting camel gamma2 and
gamma3 in vivo repertoires.";
RL Submitted (SEP-2002) to the EMBL/GenBank/DBSJ databases.
DR EMBL; AB092051; BAD00413.1; -;
FT NON_TER 1
FT NON_TER 121
SQ SEQUENCE 121 AA; 12867 MW; 34F0EB03C2404119 CRC64;
Query Match 66.2%; Score 421; DB 2; Length 121;
Best Local Similarity 65.5%; Pred. No. 2.1e-34;

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| Matches | 78; | Conservative | 17; | Mismatches | 22; | Indels | 2; | Gaps | 1; |
|---------|-----|-----------------------|----------|----------------|---------------|--------------|-----|------|----|
| Qy | 1 | EVKLEESGGGLVQPGGSMKLS | CVASGE | IFSNHWNWVRQSP | EKGLEWVAEIRSK | INSAT | 60 | | |
| Db | 1 | QVQLVESGGGLVQPGGSLRL | SCAASGFT | FSSSWMTWRQAPGK | GLEWVTGISTAGT | N--T | 58 | | |
| Qy | 61 | HYAESVKGRFTISRDDSKSA | VYLQMTDL | RTEDTG | VYVYCSRNYYG | STYDHWGQGT | 119 | | |
| Db | 59 | YYADSVKGRFTISRDNAKSL | LYLQMN | SLKSEDTAL | YCATNRAGGTG | DYWGQGTQVTVS | 117 | | |

Search completed: December 15, 2004, 17:20:55
 Job time : 134.164 secs

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